# Radboud Universiteit

**Gendered addressing in Polish: How does a mismatch between addressee gender and the gender marking on second person verbs affect processing?**

Agnieszka Szuba, 4584600

Master's thesis

First supervisor:        Theresa Redl

Second supervisor:    prof. dr. Helen de Hoop

Programme:              Research Master in Language and Communication

Submission date:       12th August 2019

# Abstract

The use of masculine gender marking to refer to people of all genders in certain contexts is common across languages (e.g. Hellinger & Bussman, 2001). Studies on such generic usage of the masculine gender in the third person found that they are not interpreted as entirely gender-neutral. Rather, they activate associations with men and favour men over women as referents during the comprehension process. However, less is known about the interpretation of masculine generics outside of the third person. This thesis, as far as I know, is the first attempt at studying the online processing of masculine generics in the second person. This is done through a self-paced reading experiment on the processing of second-person singular past tense verbs in Polish. Such verbs require either feminine or masculine gender marking. In cases where the addressee can be of any gender, it is common to use masculine gender marking with a gender-unspecific intention. On the other hand, it is not possible to use feminine gender marking in a similar way. In the experiment, male and female Polish native speakers were presented with short narratives asking them to imagine themselves in specific scenarios. In the experimental texts, the crucial verb was either a second-person singular past tense verb with masculine gender marking, the same type of verb with feminine gender marking, or a gerund verb which cannot be marked for gender. It was hypothesised that both men and women would read the past tense verbs with gender marking mismatching their own gender more slowly than the gerund verbs. Furthermore, this effect was expected to be larger for men, for whom being addressed using feminine marking constitutes a pragmatic violation. However, these hypotheses were not supported. Instead, the results revealed that while the gender-mismatching verbs were read equally fast as the gerund verbs, the verbs with gender marking *matching* participant gender were read faster. Several possible explanations are offered for this effect, including that there is a baseline advantage of second-person singular verbs compared to gerund verbs. Ultimately, however, more research is needed to disambiguate the effect of second-person verb gender marking on processing.

## Acknowledgments

This thesis would not have been possible without the help and support of multiple people. First and foremost, I would like to thank my supervisors, Theresa Redl and Helen de Hoop. Theresa has been, time and again, a remarkable example of a great scientist to me. Not only that, her dedication and engagement in my thesis were more than I could have ever asked of a supervisor. Her kind and supportive words made me go through with my ideas whenever I was beginning to doubt them. I am also grateful for Helen's excitement towards my project, and for her making the time to share her invaluable knowledge with me.

I would like to thank everyone who made it possible for me to successfully conduct my experiment in Poland. The biggest thank you goes to professor Joanna Błaszczak from the University of Wrocław who gave me a space to conduct the experiment, and who has without a fail answered my many questions about the Polish language among other topics. My gratitude also goes to the many, many people who have helped me through my search for participants. And, of course, to the participants themselves. You have eased the worries of everyone who was starting to suspect that I will never come back from Wrocław. Though, at the same time, I would like to thank the city of Wrocław for making me secretly excited at the idea.

I cannot write this section without thanking my family. I struggle to think of a family member who did not get involve in my thesis in one way or another. The biggest thank you goes to my parents, because without them I would not have done this Master in the first place, and because they took upon themselves the painstaking task of correcting my (slightly deficient) Polish. I would also like to thank my siblings, as well as Nicolas, for helping me with some slightly less painstaking tasks. Thank you also to the family members who helped me with finding participants and by filling out my pre-test questionnaire. Finally, special thanks go to my family in Wrocław for feeding me their amazing pizza and making sure that I drink enough beer.

# Contents

# 1. Introduction

Hello, welcome. Are you sitting comfortably? Have you prepared yourself something nice to drink? I hope so, because you have got quite a few pages to get through in this thesis.

Such uses of the second person singular are often employed as a rhetorical device with the intention of making the reader feel a certain way. What effects did it have on you? Perhaps it made you feel as if you were being personally addressed? Or it gave you the feeling that a certain relationship between you, the reader, and me, the writer, was formed? Or it caught your attention and made you want to keep reading?

There is evidence that the use of the second person singular has at least some of those effects on the addressee. For example, Fields and Kuperberg (2012) found that the use of the second person singular enhanced people's attention during reading. Cruz, Leonhardt, & Pezzuti (2017) found that the use of the second person singular in brands' social media posts increased customer involvement. Brunyé, Ditman, Mahoney, & Taylor (2011) found that participants reported to be more emotionally affected by narratives that were written in the second person singular. Importantly, these effects occur even when the context makes it clear that the addressee is not being personally addressed, but rather is one of many (potential) addressees. You were probably aware that I did not write my thesis just for you, yet, it is possible that you reacted to my use of the second person singular similarly to the way you would react if I were actually addressing you personally.

What happens, however, when the second person singular can take more than one form in a language, and one of these forms is either more, or less, appropriate depending on who the addressee is? Would the addressee be affected differently by the use of the second person singular depending on which of the forms is used? An example of a language in which different forms of the second person singular are used depending on the addressee is Polish. In Polish, verbs in the past tense have obligatory feminine or masculine gender marking. Normally, the gender marking that is used matches the gender of the referent. Let us take the opening paragraph of this thesis as an example – if it was written in Polish, the verb *prepared* would be translated to *przygotowałaś* if addressing a woman, and to *przygotowałeś* if addressing a man (the difference is in the second to last letter). However, I was not addressing any specific man or

1

woman, but rather anyone who reads the thesis – which I expected to include both men and women. Which verb form should be used then? Polish speakers employ one of the two main options in such situations: using both forms (e.g., *przygotowałaś czy przygotowałeś* 'prepared-FEM or prepared-MASC' or *przygotowałeś/aś*) or using the masculine form, which in such contexts is commonly understood as being gender-unspecific, rather than addressing exclusively men.

This means that, in certain contexts, women are addressed using verbs with masculine marking. On the other hand, whenever a woman is addressed personally and when we know her gender, feminine marking is always used. This preference for the use of feminine marking when addressing women could also mean that women have a preference for feminine marking during language processing (or a dispreference for masculine marking). The main aim of this thesis is to investigate this hypothesis.

The asymmetry between the referential possibilities of the masculine and feminine grammatical gender is not unique to the case of second person verbs in Polish. It has been documented in many languages and in many different linguistic forms (e.g., Hellinger & Bussmann, 2001; 2002; 2003; Hellinger & Motschenbacher, 2015). For example, this discrepancy can be seen in the pronoun systems of many languages. In English, *he* can be used when the gender of the referent is unknown or unspecified, such as in example 1. In French, just like in many other languages including Polish, the masculine third person plural pronoun (*ils* in the case of French) can refer to either male or mixed-gender referents, while the feminine pronoun (*elles)* can only be used to refer to all-female referents.

1)   A person must always carry *his* ID card with *him.*

In the last few decades, research has been investigating whether masculine generic forms – grammatically masculine forms used to refer to people regardless of their gender – are interpreted in a gender-neutral way or not. The vast majority of this research has been conducted on masculine generic nouns and third person pronouns that are used to describe a person who can be of any gender, or a mixed-gender group. The research has found that the use of grammatically masculine forms to refer to people in general biases readers and listeners to picture the described

referent as male (e.g., Bojarska, 2011; Garnham & Yakovlev, 2015; Gastil, 1990; Gygax, Gabriel, Sarrasin, Oakhill, & Garnham, 2008; Moulton, Robinson, & Elias, 1978).

Masculine generic forms outside of the third person has received much less attention from researchers. However, I am aware of two studies which showed that they can have negative consequences for women. Both of the studies were conducted on Hebrew, which marks gender on adjectives, as well as verbs in all tenses. Vainapel, Shamir, Tenenbaum, and Gilam (2015) asked their participants to complete a study motivation questionnaire which consisted of first-person statements that had to be rated on a Likert scale according to how much the participant agreed with them. The results showed that when the statements were written using masculine marking, compared to feminine marking, women reported less study motivation (=less agreement with the statements) on three out of the five questionnaire constructs. Katz and Regev (*n.d.*) found that when questions on math and reading comprehension tests addressed the test-taker using masculine gender marking on second person verbs and adjectives, women scored lower on the tests than when feminine marking was used.

The present study aims to extend the research on non-third person masculine generics to Polish by investigating the case of second-person verbs with masculine marking being used to address women. Moreover, it employs a psycholinguistic perspective with the aim of identifying whether women experience a processing disadvantage when they are addressed using feminine marking. Finding a processing disadvantage would verify that Polish speakers are sensitive to the gender marking that is used, and that masculine gender marking is not interpreted in a genderless way. In addition, it would show us that the masculine gender marking has a differential effect on men and women as soon as it is encountered during language comprehension. While the study by Katz and Regev (*n.d.*) showed that men and women may respond differently to being addressed using masculine gender marking, the method that they used does not tell us anything about where this differential behaviour may come from nor the process that may underly it.

The research question will be investigated through a self-paced reading experiment. In the experiment, Polish speakers read short stories written in the second person singular asking them to imagine themselves as protagonists in certain scenarios. The second sentence of these stories

contains a verb that is either a past tense verb with masculine gender marking, a past tense verb with feminine gender marking, or a gerund verb with no gender marking. The time taken to read the verb in each of these variants is interpreted as indicative of processing ease, which is the basic assumption behind reading time methodologies (Just & Carpenter, 1980) – presumably, the faster a verb is read the easier it is processed. Collecting reading time data can therefore reveal whether there are differences in how easily women process verbs in each one of the three variants.

In addition, reading time data are also collected from male Polish speakers in the same experiment. The male participants will serve as a control group in two ways. Firstly, the difference in their reading time of the items with and without masculine gender marking will be compared to women's data, in order to verify that any effect found for women is in fact due to their gender. Secondly, an additional condition of addressing the participants using verbs with feminine marking will be introduced. As addressing men using feminine marking represents a clear case of a pragmatic violation, having this extra condition will allow us to compare the effect of a gender mismatch that represents such a violation (men being addressed using feminine marking) with the effect of a mismatch that is not a violation (women being addressed using masculine marking). In addition, investigating how men process being addressed with verbs with feminine gender marking can help us verify whether reading is in fact something that can be affected by a mismatch between a linguistic feature and addressee identity. The processing of such mismatches has only so far been investigated using event-related brain potentials (ERPs) (e.g., Hanulíková & Carreiras, 2015; Jiang, Li, & Zhou, 2013).

This thesis is structured as follows. Chapter 2 introduces the grammatical gender system of Polish and reviews research on masculine generics. Chapter 3 discusses the special role of the second person singular and the effects that it has been found to have on the addressee. Chapter 4 reviews research on pragmatic violations in the first and second person, and discusses possible reasons why Polish speakers may experience processing difficulties when addressed using a verb with gender marking that mismatches their gender. Chapter 5 introduces the current study and its hypotheses. Chapter 6 describes the methodology, chapter 7 the results, and chapter 8 closes with a discussion of the results and suggestions for future research.

## 2. Grammatical gender and masculine generics

### 2.1 The grammatical gender system in Polish

Polish is characterised by a rich grammatical gender system. For the sake of simplicity, I will focus only on gender in the singular number, as the plural number is not relevant for the current study. Gender is marked on nouns, pronouns, adjectives, determiners, and numerals. It is also marked on verbs in the past tense, as well as in the future tense of imperfective verbs and the conditional mood, both of which are based on the past tense. The gender of nouns can be most simply divided into masculine, feminine, and neuter (e.g., Swan, 2002). However, for many personal nouns, it is possible to use productive morphology in order to create a masculine and a feminine version of each noun, which can then be used to refer to male and female referents, respectively. For example, while the noun *kwiat* 'flower' is always masculine, the word for 'teacher' exists in both feminine, *nauczycielka*, and masculine, *nauczyciel,* forms.

The gender marking on the other parts of speech is normally made based on agreement – either with the noun or with the referent. Perlin and Mielczarek (2014) divide the Polish gender system into a grammatical gender category (*kategoria rodzaju)* – gender agreement based on the noun - and a sex category *(kategoria płci)* – gender agreement based on the referent's (perceived) gender. This division is particularly interesting for the topic of this thesis, because it is made along the lines of person. The authors show that in the third person, agreement is predominantly made based on the noun. In other words, if the grammatical gender of the noun and the gender of the referent mismatch, agreement is most of the time made with the noun. However, in the first and second person, agreement is usually made with the gender of the referent. Interestingly, the neuter gender, while present in the third person disappears in the first and second person, in line with the historically predominant perception of human gender as binary.

Putting all of the above information together, it accounts for the fact that when addressing someone in the singular person, we must choose between feminine and masculine marking on past tense verbs, based on the gender of the addressee. However, as mentioned earlier, and as will be described in more detail in the next section, the second person singular can – and sometimes must - also be used a) when there are multiple (potential) addressees of more than one gender, and/or b) when we do not know the addressee's gender. The agreement rules described above are not sufficient in such scenarios. In the next section, we will take a closer look at

examples of such scenarios, as well at the strategies that Polish speakers employ with respect to gender marking.

## 2.2 Gender marking in the second person singular

When there is a singular addressee whose gender we know (or assume), masculine gender marking on verbs (as well as adjectives) is obligatory with male addressees, and feminine marking is obligatory with female addressees. When this is not the case, and when we still want to use the second person singular, there are two main strategies that Polish speakers employ: using both verb forms or using the masculine marking. When both forms are used, it can either be the two full forms (e.g., *spałaś czy spałeś* 'slept-2SG.F or slept-2SG.M'), or one full form with two suffixes (e.g., *spałeś/aś* 'slept-2SG.M/2SG.F').

Less prominent strategies include creating two versions of a text, one with masculine marking and one with feminine marking, and showing different versions to men and women. This is often not possible, but can be done, for example, with addressees of a mailing list, or with participants in an experiment. Attempts at neutralising the Polish language can also be made, though they occur pretty much exclusively within the LGBTQ+ communities. For example, one such strategy is extending the neuter gender marking to the second person, by using the verb suffix *oś* (instead of the feminine *aś* or the masculine *eś*) (TransGrysy, 2018), since *o* is used to mark the neuter gender in the third person.

Examples 1-5 provide some real-life examples of the use of masculine marking on second person singular verbs with (potential) addressees of any gender.

1) A signpost outside of an ice cream shop in Wrocław, Poland.

| *Najświeższe* | *lody* | *jakie* | *kiedykolwiek* | *jadłeś.* |
|---|---|---|---|---|
| Freshest | ice cream | that | ever | ate-2SG.M |


'The freshest ice cream that you have ever eaten.'

2) Meditation video (Mostowska, 2018, 00:22).

| *Chciałabym,* | *abyś* | *przede* | *wszystkim* | *znalazł[1]* | *dla* | *siebie* | *wygodną* | *pozycję.* |
|---|---|---|---|---|---|---|---|---|
| Want-COND-1SG.F | that-2SG | before | all | found-3SG.M | for | yourself | comfortable | position. |

'First of all, I would like you to find a comfortable position.'

3) A website with information about higher education (Centrum EFEKTY, *n.d.*).

| *Czy* | *uczelnia,* | *którą* | *wybrałeś* | *jest* | *naprawdę* | *dobra?* |
|---|---|---|---|---|---|---|
| QUES | university | that | chose-2SG.M | is | really | good |

'Is the university that you chose really good?

4) Terms and conditions of a news website. (https://www.onet.pl/)

| *Jeśli* | *udzieliłeś* | *zgody* | *na* | *przetwarzanie* | *danych* | *możesz* |
|---|---|---|---|---|---|---|
| If | gave-2SG.M | consent | to | processing | data | can-2SG |

| *ją* | *w* | *każdej* | chwili | wycofać. |
|---|---|---|---|---|
| it | in | every | moment | withdraw. |

'If you agreed to the processing of your data, you can withdraw your consent at any time.'

---

[1] The Polish subjunctive construction uses third person verb conjugation for all persons. Person marking denoting the referent is specified on the the conjunction *by/aby/żeby* 'that/so that'.

5) An email from a non-profit organisation's mailing list in my inbox (Akcja Demokracja, April 30, 2019). Note that it is personalised with regards to my name, but not my gender.

| *Zachęcam* | *Cię* | *Agnieszko,* | *byś* | *przed* | *jutrem* | *ustawił* | *nakładkę* | *na* |
|---|---|---|---|---|---|---|---|---|
| Encourage-1SG | you | Agnieszka-VOC | that-2SG | before | tomorrow | put.on-3SG.M | overlay | on |

| *swoim* | *zdjęciu* | *profilowym.* |
|---|---|---|
| your | picture | profile-ADJ |

'I encourage you, Agnieszka, to put on an overlay on your profile picture before tomorrow.'

## 2.3 Masculine generics in Polish and other languages

The use of the masculine grammatical gender to refer to not only men in certain contexts is not limited to the second person. In Polish, it occurs in the first and third person as well. For example, first person statements written by someone other than the referent of 'I' – such as in questionnaires or agreements (e.g., 'I have read and understood the terms and conditions') – can be written using only masculine gender marking. In the third person, the feminine plural pronoun *one* is used to refer to multiple women, while the masculine plural pronoun *oni* is used to refer to groups of men, but also to mixed-gender groups. Masculine forms of nouns, even when masculine-feminine noun pairs exist, can also be used to refer to women. On the other hand, the same cannot be said about feminine gender marking.

Examples of the non-male-specific use of the masculine grammatical gender do not stop at Polish, but are present in many other languages (Hellinger & Bussman, 2001; 2002; 2003; Hellinger & Motschenbacher, 2015). Moreover, this phenomenon is often a topic of heated debate, as it has been criticised as reflecting and perpetuating sexism. For example, Stahlberg, Braun, Irmen, & Sczesny (2011) call masculine generic language „the most far-reaching and most fundamental asymmetry" in the category of linguistic sexism. In their view, the use of masculine forms to refer to humans in general, „equate[s] maleness with humanness" (p. 169). Strong opinions about masculine generics are not only held among linguists, and they are often linked to broader opinions about gender. In English speaking countries, many guidelines aimed at making the language more gender-inclusive through reducing the use of masculine generics have begun to emerge during and after second-wave feminism (e.g., APA Publication Manual

Task Force, 1977; Miller & Swift, 1980). In addition, studies found that German speakers using masculine generic language are perceived as more sexist (Vervecken & Hannover, 2012), and more negative attitudes towards gender-inclusive language in English, French, and German have been linked to more sexist attitudes (Parks & Robertson, 2004; Sarrasin, Gabriel, & Gygax, 2012).

The argument that masculine generics are sexist has attracted the attention of linguists who wanted to investigate this claim empirically. More specifically, they wanted to see whether the choice of masculine generic vs. gender-neutral language in the third person affects the mental representation of the referent that is formed by the reader or hearer. The hypothesis was that in the absence of other gender cues, people would be more likely to picture the referent as male when masculine generic pronouns or nouns are used. In order to find out if this is the case, researchers first presented participants with sentences describing a person or people using a masculine generic form, or alternative gender-neutral or gender-inclusive forms. Subsequently, they used different methods in order to find out what kind of mental image of the referent the participants have formed.

For example, Moulton, Robinson, & Elias (1978) presented their participants with a prompt text, such as „In a large coeducational institution, the average student will feel isolated in his introductory classes". The possessive pronoun that was used in the prompt varied between *his*, *his or her*, and *their*. The participants then had to write a short story fitting the theme of the prompt. The results revealed that, despite that the intended meaning of all pronoun versions was gender-unspecific, more stories featuring male characters were written when the participant was shown a prompt with the masculine generic pronoun *his*. Similar methods, with similar results, were adopted in several other studies on the third person masculine generic pronouns in English (e.g., Switzer, 1990; Gastil, 1990; Hamilton, 1991, study 2).

Other studies have adopted more direct methods of studying whether third person masculine generics bias the reader towards a male mental representation of the referent. These methods did not rely on data from an additional task completed *after* being exposed to the stimuli, but rather, they investigated whether a male bias of masculine generics is visible *during* reading. The basic assumption of such studies was that if people form a male mental representation of a person or group described with a masculine generic, they would have more trouble processing a

continuation of the text that reveals that person or (subset of) that group to be female. For example, Gygax, Gabriel, Sarrasin, Oakhill, & Garnham (2008) used stimuli such as in Example 6 in English, German, and French. Crucially, in the German and French versions, the noun phrase (e.g., social workers) was in its masculine form (*Sozialarbeiter, assistants sociaux*). After reading each text, the participants had to indicate whether the second sentence was a sensible continuation of the first one, while their reaction times were being measured. They found that the sentence that specified a subset of the group to be female took longer to be accepted in German and in French, where the group was introduced using a masculine generic form. On the other hand, both male and female continuations were accepted equally quickly in English.

6) 'The social workers were walking through the station. Since sunny weather was forecast several of the women/men weren't wearing a coat.'

Irmen and Rossberg (2004), Irmen (2007), and Garnham & Yakovlev (2015) used a similar method, except that instead of asking the participants to evaluate the sentences, they simply measured how long it took them to read feminine versus masculine continuations. They found that the use of German (Irmen & Rossberg, 2004; Irmen, 2007) and Russian (Garnham & Yakovlev, 2015) masculine noun forms was associated with slower reading of female continuations.

Together, these studies suggest that even in contexts where the use of masculine pronouns or nouns is commonly understood to be gender-unspecific, the masculine associations of those forms pertain. These associations influence how likely the described referent is to be imagined as female versus male. Furthermore, there are studies which show that this bias may have real-world negative consequences for women. For example, Horvath and Sczesny (2016) ran a hiring simulation study in German. They found that female applicants for high-status positions were perceived as a worse fit for the job when the job title made use of the masculine noun form, compared to a masculine-feminine pair. This finding suggests that the use of the masculine job title may have influenced the recruiters to think of the ideal candidate as male. Another study by Vervecken, Hannover, and Wolter (2013) with German- and Dutch-speaking school children found that when a stereotypically masculine profession was introduced using only the masculine form, women were perceived as less successful at that profession. Moreover, girls expressed less

of a desire to perform said professions in the future when the masculine noun form, as opposed to a masculine-feminine pair, was used.

These studies suggest that the claim that masculine generics are sexist is not entirely unsupported. Though they intend to be gender-inclusive, their grammatical gender may be favouring men and disfavouring women when it comes to the gender that we subconsciously assign to the referent. However, all of the studies above have only taken into account the possible negative effects of masculine generic forms in the *third* person. They have also only looked at the processing of masculine generics in the context of having little other information about the referent. We cannot apply their findings to the current research question of whether women experience a processing disadvantage when addressed using verbs with masculine marking.

I am only aware of two studies of non-third person masculine generics: one on the first person (Vainapel et al., 2015), and one on the second person (Katz & Regev, *n.d.*), both on Hebrew. Both of the studies were concerned with the consequences, rather than the processing itself, of verbs and adjectives with masculine marking referring to women. However, they both indicate that a male bias of masculine generics may also exist in the first and second persons.

Vainapel and colleagues (2015) administered an abridged version of the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, Smith, Garcia, & McKeachie, 1991) to college students. The questionnaire consisted of five dimensions: Intrinsic Goal Orientation, Task Value, Control of Learning Beliefs, Self-Efficacy for Learning & Performance, and Test Anxiety. The questions consisted of first-person statements that the participants had to rate on a 7-point Likert scale. A higher score on the scale corresponded with a higher score on the construct. Crucially, in one version of the questionnaire, only masculine marking on the first-person verbs and adjectives was used, and in another version both masculine and feminine marking were used, with the two types of suffixes separated by a slash. The results showed that women who completed the version of the questionnaire with only masculine forms reported lower scores on the Intrinsic Goal Orientation, Task Value, and Self-Efficacy dimensions than the women who completed the version with both masculine and feminine gender marking. No similar effect was found for the male participants.

Katz and Regev (*n.d.*) administered math and reading comprehension tests to a large and diverse sample of Hebrew speakers. Some participants were given a version of the tests that used

masculine marking on second-person verbs and adjectives, while others were administered a version with feminine marking. They found that performance decreased when people were addressed with gender marking that mismatched their gender. Interestingly, the decrease in performance was lower for men than for women. It was also lower on the reading comprehension test than on the math test. Gender marking was also associated with time spent on the test – more time was spent when gender marking matched the test-taker's gender. More time spent on the tests in turn predicted higher scores.

These studies suggest that masculine gender marking in the first and second persons is also not devoid of its masculine associations, even in contexts where its use is acceptable in reference to women. However, we are not sure what lies behind the effects found in the two studies. Authors of both studies propose similar explanations for the effect that they found. The first explanation is that the presence of masculine gender marking activates thoughts of men and that it created masculine associations with the measured constructs (motivation, math skills, reading skills). This may have decreased women's feelings of self-efficacy with regard to those constructs, which in turn could have affected their motivation. This would explain the lower motivation reported, as well as the shorter time spend on the tests, and lower scores on them. The phenomenon of negative stereotypes about the abilities of certain groups negatively affecting their performance is widely reported (see e.g., Spencer, Logel, & Davies, 2016, for review). However, it is only reported with regards to constructs where established negative stereotypes exist in the society. Such stereotypes exist about math (e.g., Smetackova 2015), but it is less clear whether they exist about reading comprehension or study motivation. Note that men's performance on the math and reading comprehensions tests also decreased when feminine marking was used. Therefore, the activation of negative gender stereotypes through the use of masculine gender marking cannot be (the only) explanation for the effect. It is less clear whether gender marking could have been responsible for *creating* such stereotypes. It should be noted, though, that in Katz and Regev's (*n.d.*) study, the effect observed was indeed largest in the group that was most susceptible to negative stereotyping – namely, women taking the math test.

The second explanation poses that women's identification with the statements (Vainapel et al., 2015) and sense of belonging to the target group of addressees (Katz & Regev, *n.d.*) were negatively affected by the presence of masculine gender marking. For the first person statements,

the use of masculine gender marking could have made it more difficult for women to relate the statements to themselves, which would explain their lower agreement with them. It could be that when both feminine and masculine gender marking was present in the questionnaire, it made it easier for women to put themselves in the described situations, which resulted in more agreement with the statements. As for the results of the study by Katz and Regev (*n.d.*), the authors hypothesise that when feminine marking is used, women may be more likely to see themselves as representative of the prototypical test taker. This, in turn, may increase their motivation and confidence in succeeding, which translates to better test results.

Of course, there can also be other possible reasons for the reported findings. Studies showed that the use of the second person can have a range of effects on the addressee. For example, Fields and Kuperberg (2012) found that people were more attentive when reading short narratives written in the second person compared to third person. Mayer, Fennell, Farmer, and Campbell (2004), as well as Stiller and Jedlicka (2010) found that learning outcomes improved when the educational materials made use of second person marking as opposed to third person marking and/or no person marking. It is possible that when the second person marking also has gender marking that mismatches the addressee's gender, these effects are reduced, which could potentially explain the reduced performance on the tests in Katz & Regev's (*n.d.*) study.

Ultimately, we can only hypothesise about what lies behind those reported effects. It is also important to keep in mind that the findings of Vainapel et al. (2015) on the first person may not apply to the second person (for example, if the questionnaire contained second-person questions rather than first-person statements). Nevertheless, both of the studies provide a useful suggestion that there are more effects of the male bias of masculine generics than the ones reported in the third person studies. The aim of the current study is to find out whether readers are sensitive to the gender marking used, and whether the use of the gender marking that mismatches their gender has a negative effect on their processing. If this is found to be the case for the female readers addressed using masculine marking, which is a common practice, it would suggest that the masculine marking is not interpreted as gender-neutral by female addressees. Thus, the present study would be the first one, as far as I know, to provide evidence that masculine generics outside of the third person are easier to interpret when referring to men than when referring to women.

The next chapter provides a more detailed characterisation of the second person. It also takes a closer look at some of the effects that second person marking has been found to have on the addressee (e.g. Fields & Kuperberg, 2012; Mayer et al., 2004; Stiller & Jedlicka, 2010). Although it is beyond the scope of the present study to directly test whether these effects differ depending on the gender marking used in the second person, the various findings illustrate that conducting research on masculine generics in the second person may be particularly valuable, considering the impact second person marking can have on the reader.

## 3. The second person

Before reviewing studies on the effects of second person singular use on the reader, let us turn to a brief characterisation of the second person. There are several distinctions that can be made with regards to the existing forms and interpretations of the second person. Not all of these distinctions exist in all languages, but they are all relatively common across languages (Siewierska, 2004), and they all exist in Polish.

- **Number**. Many languages mark the distinction between plural and singular in the second person. When a language, such as English, does not grammatically mark number in the second person, the distinction between whether the second person marking denotes a singular or a plural referent in a specific context is often still relevant.
- **Formality.** Many languages have the distinction between formal (or polite) and informal second person[2]
- **Deictic vs. generic.** The most basic interpretation of the second person, and one that exists in all languages, is deictic, wherein its referent is the intended addressee. Note that this is not necessarily a single person, but, as we have seen in the example at the beginning of this thesis, it can be used to address multiple (potential) addressees. The use of the second person singular, rather than plural, stems from the fact that they are all addressed one at a time, rather than as a group. Another function of the second person is a generic one. Under this interpretation, the second person can denote a prototypical individual, or people in general (Malamud, 2012), though its interpretation can also be more complex, such as it referring to the speaker (e.g., Auer & Stukenbrock, 2018; de Hoop & Tarenskeen, 2015; Skärlund, 2017).

The present study is concerned with the singular, informal, deictic second person. This is also the type of second person that most of the existing studies on the effects of second person use have been concerned with.

Depending on the language, second person can be marked on pronouns, as well as on verbs. In Polish, it is marked on both pronouns and verbs, but since Polish is a pro-drop language, verb

---

[2] Though the formal form of address is often not grammatically in the second person. This is also the case in Polish, where the title *Pan/Pani* 'Mr./Mrs.' is used in combination with the *third* person singular verb conjugation.

marking is often the only person marking present in a sentence. While most of the literature reviewed below looked specifically at second person *pronouns*, the effects described can likely be generalised to any type of second person marking, and the reference to pronouns likely stems from the fact that most of the studies were conducted in English, which only marks second person on pronouns.

### 3.1 The interpretation of second-person reference

Wechsler, in his 2010 article, proposed the *de se* theory of pronouns. Under this theory, the interpretation of first and second person is guided by a simple rule: addressees self-ascribe second person pronouns and speakers self-ascribe first person pronouns. All other cases where self-ascription is not enough to arrive at the correct interpretation (e.g., interpreting, rather than producing, first person pronouns, or overhearing someone else being addressed) nevertheless start out with the self-ascription rule as the first step towards interpretation. The additional steps involve perspective-shifting and inferences about the speaker intentions. This means that the easiest and most automatic interpretation of second person pronouns would be for the hearer or reader to self-ascribe them, because it does not involve taking any extra steps that require advanced cognitive skills. This is evidenced by the findings that children with poor theory of mind skills, such as young children and children with autism, struggle with non-*de se* uses of pronouns, i.e., the production of second person pronouns and the interpretation of first person pronouns (Charney, 1980; Chiat, 1986; Tager-Flusberg, 1994). Furthermore, Köder and Maier (2016) provide evidence that even children between 8 and 10 years old, which is an age at which they should have already developed theory of mind, can struggle with the correct interpretation of second person marking when it refers to someone other than them.

This theory brings up the question of how gender marking would fit into it. If processing difficulties associated with a gender mismatch are found in the present study, this could indicate that self-ascription is not automatic in all cases of second person marking. Rather, it would indicate that both person marking and gender marking are taken into account when interpreting second person verbs. In case of conflicting cues (second person pointing towards self-ascription, gender mismatch pointing against it), it may take longer to self-ascribe the second-person verbs (or self-ascription may be prevented completely in some cases).

**3.2 The effect of person marking on perspective taking**

Among the most studied effects of second person marking on the addressee is internal perspective taking. Adopting an internal perspective means that the described events are mentally simulated as if the reader or listener was experiencing them themselves (e.g., Brunyé, Ditman, Mahoney, Augustyn & Taylor, 2009). This contrasts with an external perspective where one constructs a representation of the described events from an observer's perspective. Although some research findings suggest that an internal perspective seems to be the default perspective adopted during language comprehension (e.g., Kemmerer, Castillo, Talavage, Patterson, & Wiley, 2008; Rüschemeyer, Brass, & Friederici, 2007), others have found that person marking can modulate the perspective that is adopted. Namely, readers have been found to be the most likely to adopt an internal perspective of the events that are described in the second, compared to third and first, person.

An example of studies on the effects of person marking on perspective comes from research by Brunyé et al. (2009) and Brunyé et al. (2016) on English, and by Sato and Bergen (2013) on Japanese. They presented their participants with texts in the second, third, and (sometimes) first person, after which the participants had to verify whether an image depicted the described action or not. The images either showed the action from an internal or an external perspective. The studies revealed that people were faster to verify internal-perspective images when second person pronouns were used, while they were faster to verify external-perspective images when third person pronouns were used. The results for the first person texts varied: sometimes they triggered an internal and sometimes an external perspective. It must be noted, however, that Brunyé and colleagues (2016) found that second person marking did not result in adopting an internal perspective for all participants, but rather there was a lot of individual variation. Furthermore, effect of perspective taking was mediated by emotional engagement in the texts.

Internal perspective taking, in turn, has been associated with better memory of the described events (e.g. Engelkamp, 1998; Nilsson, 2000; Zimmer et al., 2001). Studies by Ditman, Brunyé, Mahoney, and Taylor (2010) and Brunyé, Ditman, Mahoney, and Taylor (2011) also found direct evidence that person marking has an effect on memory of described events. They found that memories of described actions and spatial information, respectively, were stronger when texts were written in the second, as opposed to first or third, person.

A study by Andonova, Savcheva, and Todorova (2015) on Bulgarian, another Slavic language, seems particularly relevant in the context of the present research. Although the study was concerned with first, not second, person, it showed that gender marking on the verb can influence the likelihood of an internal perspective being adopted. Using a similar design as the perspective-taking studies described above, they found that participants were significantly slower to verify internal-perspective images when the verb gender marking in the descriptions of the events mismatched their own gender. No similar effect was found for the external-perspective images. Unfortunately, we do not know whether this effect was present to the same extent for women (who can be referred to using masculine gender marking on first person verbs in certain contexts) as it was for men, as the authors did not include participant gender as a variable. We also should not generalise the findings to what may happen in the second person. Previous studies found that first person marking was associated with both internal and external perspectives, suggesting that the perspective taken after reading first-person texts may be more easily influenced by different factors compared to the second person. Nevertheless, the study shows that verb gender marking is a potentially influential factor in determining whether events are simulated from the actor's perspective or not.

### 3.3 Other effects of second person marking

Various other effects of the second person on the addressee have been reported in the literature. For example, Andeweg, Hendrix, van 't Hoff, & de Hoop (2013) found that readers reported higher identification with the protagonist when they read stories written in the second, rather than first, person. Brunyé et al. (2011) and Child, Oakhill, and Garnham (2018) found that readers were more emotionally affected by narratives written in the second person, compared to first or third person. Child et al. (2018), however, only found this effect with positively, but not negatively, valanced stories. The authors interpreted this as people resisting immersing themselves in negatively valanced stories, which prevented the effect from taking place. Child et al. (2018) also found that positively valanced second person stories were read faster than third person stories, indicating easier processing. This was attributed to the fact that there is no need to construct a mental representation of the referent in second person stories (because the referent is the addressee), which is not the case with third person stories.

In an ERP study, Fields and Kuperberg (2012) found that second, as opposed to third, person marking is associated with a larger late positivity, which is indicative of more attention during reading. The authors interpret this finding in the larger context of the effect of self-relevance on late positivity reported in the literature. Related to self-relevance, Cruz, Leonhardt, and Pezzuti (2011) assessed the extent to which participants engaged in self-referencing (defined as encoding and relating information to oneself) after reading brands' social media posts that featured either second person pronouns or no pronouns. They found that self-referencing was higher after viewing posts featuring second person pronouns. The attitude towards the brand, as well as consumer involvement were also higher, both of which were mediated through self-referencing. However, in a subsequent study they found that this effect did not occur in people who reported highly collectivistic values, suggesting that using second person marking increases self-referencing only in more individualistic consumers.

Finally, studies by Mayer et al. (2004) and Stiller and Jedlicka (2010) show evidence for improved learning outcomes when the learning material contains second person marking. Both studies made use of instructional materials on topics in biology that contained second person marking in one version, and definite articles (Mayer et al., 2004) or indefinite articles and third person marking (Stiller & Jedlicka, 2010) in the other version. Both studies found better learning outcomes by the participants who saw the materials with second person marking. Specifically, Mayer et al.'s (2004) participants scored higher on a test assessing their acquired knowledge, though not on a test measuring information retention. Stiller and Jedlicka's (2010) participants scored higher on tests measuring the acquired knowledge and information retention. However, after controlling for prior knowledge, this effect remained only for the participants with high prior knowledge, and only on the information retention tasks.

To summarise, the use of the second person has been found to: trigger self-ascription and the adoption of an internal perspective of the described events, improve spatial and motor memory of the events, improve certain learning outcomes, facilitate processing, as well as increase identification with the protagonist, emotional impact, attention, and self-referencing. We still largely do not understand the relationship between those effects, nor the processes underlying them. However, it seems that in many ways, the intended impact of a text (whether it be persuasion, education, or putting oneself in a certain situation) may be greater when it is written

in the second, compared to first or third person. The question that the findings of the studies reviewed in this chapter bring up, though, is whether the second person would have the same impact on the addressee regardless of additional grammatical features, such as gender marking. Using a self-paced reading method, we can test directly whether readers process the second person marking in the same way regardless of gender marking, or whether they have more difficulties with gender marking that matches their own gender. If this difficulty is found, the exact consequences of it will need to be tested in future research. However, the potential of a differential impact of texts containing second-person masculine generics on men and women hopefully illustrates the need for extending research on masculine generics to the second person.

As mentioned, there are only two previous studies on non-third-person masculine generics that I am aware of (Katz & Regev, *n.d.*; Vainapel et al., 2015), both of which did not employ online processing methods. In fact, we know very little about the effect that any type of a mismatch between a linguistic feature and addressee identity would have on processing. Most processing studies have only studied such mismatches in the third person where addressee identity is described (or inferred) through the text itself. However, there are a few studies that indirectly suggest that a gender mismatch between linguistic gender marking and addressee gender would negatively affect processing, especially when such a mismatch constitutes a pragmatic violation (i.e. men being addressed using feminine gender marking). These studies will be reviewed in the next chapter.

## 4. The processing of mismatches between speaker or addressee identity and text

### 4.1 ERP studies on inappropriate or anomalous forms in the first and second person

The main hypothesis of this thesis - that women would experience a processing cost when addressed using verbs with masculine marking - relies on the assumption that people's language processing would be sensitive to being addressed with linguistic forms that are in some way not in line with their identity. However, while this idea may be intuitive, empirical research in support of it is scarce. Particularly, as far as I know, it has never been investigated using a reading time methodology. Therefore, this prediction will be validated by introducing the condition of men being addressed using feminine marking. Addressing men using feminine gender marking is something that is not considered appropriate in any context by Polish speakers. Therefore, if people's reading speed is negatively affected by being addressed with an inappropriate linguistic form, we should find slower reading by men being addressed using feminine gender marking.

Many studies in the *third* person have shown that grammatical gender disagreement, such as adjective-noun or subject-predicate agreement, does negatively affect reading (e.g., Dank, Deutsch, & Bock, 2015; Keating, 2009; Irmen & Schumann, 2011; Sagarra & Herschensohn, 2011). However, in those third-person studies the gender disagreement always exists on the sentence level. By contrast, the referent of first- and second-person sentences is always deictic, meaning that disagreement occurs only when we consider the speaker or addressee identity – something that is a feature of who produces the sentence or whom it addresses, not of the sentence itself.

While I am not aware of any reading time studies on this topic, a number of event-related brain potentials (ERP) studies suggests that people are sensitive to a mismatch between speaker or addressee identity and the linguistic form used. The ERP method measures changes in voltage at different points across the subject's scalp in response to a triggering event (such as the reading or hearing a certain word or phrase). Different ERPs are associated with different (language-related) processes (Garrod, 2006). For example, Hanuliková and Carreiras (2015), in a study on Slovak, played recordings of first- and third-person utterances spoken by male and female

speakers. The utterances contained a past-tense verb, which, like in Polish, needs to be marked for gender. They found that when the gender marking on the first-person verb mismatched the speaker's gender (e.g., a female voice saying *Susedia sa nahnevali, lebo som kradol slivky.* 'The neighbours were upset because I stole-M plums.'), an N400 effect was elicited. On the other hand, when there was a gender mismatch in the third person (e.g., *Susedia sa nahnevali, lebo svokra kradol slivky.* 'The neighbours got upset because the mother-in-law stole-M plums.'), a P600 effect was found. This shows that although listeners were sensitive to both types of gender disagreements, they were processed in different ways, as the N400 effect is usually associated with pragmatic violations, while the P600 is associated with syntactic violations.

The authors interpreted this finding as indicative of listeners creating predictions regarding grammatical agreement based on speaker characteristics. Other studies also show that such predictions are made not only with regards to grammatical agreement, but also the semantic content of the utterances. For example, Lattner and Friederici (2003), and van Berkum, van den Brink, Tesink, Kos, and Hagoort (2008) found that when speakers produced semantic content that went against what was stereotypically associated with their age, gender, or socioeconomic status, it elicited a P600 (Lattner & Friederici, 2003) or N400 (van Berkum et al. 2008) effect in the listeners.

Jiang, Li, and Zhou (2013) have investigated the processing of an inappropriate second person pronoun in Chinese. The participant, however, was not the one being addressed with the pronoun. Rather, he or she was presented with short written dialogues between two people, one of whom was the target of the pragmatic violation. There were two ways in which the pronoun could have been inappropriate. It was either disrespectful (e.g., a student addressing a professor with the informal pronoun *ni/ni-de*) or over-respectful (e.g., a professor addressing a student with the formal pronoun *nin/nin-de*). The results of the ERP study showed that readers were sensitive to both of these honorific violations, though there were also differences in how exactly they were processed. An initial N400 effect was found for both the disrespectful and over-respectful pronoun use, indicating that both forms were unexpected given the interlocutors' identities. For the over-respectful pronoun use, this effect was followed by a late positivity. On the other hand, for the disrespectful pronoun, a sustained negativity was found. The authors link those two different effects to the different ways in which the two types of violations can be (re)interpreted.

The use of the over-respectful pronoun could be interpreted as ironic or a joke. Indeed, late positivity effect has been associated with processing of non-literal language (e.g., Regal, Coulson, & Gunter 2010). However, a non-literal interpretation of the disrespectful pronoun is much less plausible, as Chinese speakers would be less likely to use it this way, given that it would be associated with a high risk of a face threat. As such, an alternative interpretation that would yield the disrespectful pronoun appropriate is less available. According to the authors, the most likely interpretation of it would be that it was used by mistake. What readers and listeners might do in such situations is to attempt to mentally rebuild the sentence, replacing the "incorrect" form with a "correct" one. This is a process that has also previously been associated with a sustained negativity effect in ERP research (e.g., Jiang, Tan, & Zhou, 2009).

These studies show that language users are sensitive to the use of linguistic forms, as well as semantic content, that is inappropriate or atypical considering the speaker or addressee identity. When the mismatching content is encountered, language users experience processing difficulties, even if they do manage to eventually integrate it into the context of the utterance. However, none of these studies have been concerned with how the *participant* themselves would react to being addressed with an inappropriate form. The processing of inappropriate forms that refer to someone else may be quite different from the processing of such forms in reference to the self. In the studies referenced above, the participants had little information about the speakers or addressees other than the information crucial to the experiment. Therefore, the role of that information could have been amplified, and so could have the response to a mismatching linguistic item. However, on the other hand, being the target of a violation may also amplify one's response. Self-relevance has been associated with an increased emotional response in a potentially face-threatening situation (Bašnáková, van Berkum, Weber, & Hagoort, 2015), which could also mean that people would be more sensitive to being the referent of an inappropriate linguistic form.

Furthermore, we cannot be sure that the processes found in the ERP studies would also be reflected in reading speed. While many language processing effects have been found using both of those methodologies (Mitchell, 2004), there are also some differences between them. For example, the N400 effect has also been found to be elicited in response to non-linguistic stimuli (Kutas & Federmeier, 2011) which could mean that it is a method more sensitive to different

types of anomalies and violations. Despite the fact that we cannot draw direct parallels between the findings of the reviewed ERP studies and the current study, they provide some ground for expecting that men would slow down in reading when addressed using feminine marking. However, these studies are less useful at making predictions about women's processing of being addressed using masculine marking. This is because addressing women using masculine marking is common-place in certain contexts, while the studies reviewed in this section were concerned with forms that are more likely to be considered either incorrect or highly atypical for a certain speaker or addressee. In the following section, the possible sources of processing difficulties in the less atypical case of women being addressed using masculine gender marking will be discussed.

## 4.2 Women's possible processing difficulties when addressed using masculine (generic) marking

In the previous section we have seen that people are sensitive to the use of linguistic forms that are inappropriate for the given speaker or addressee. We have also seen that processing can be disrupted by semantic content that is atypical for a given social group. Using masculine gender marking to address a woman would not be considered inappropriate or atypical in the context of an experimental text aimed at both male and female participants. Nevertheless, I hypothesise that being addressed using masculine marking would create a processing disadvantage for women.

### 4.2.1 Masculine marking as unexpected and atypical for female addressees

We have seen that the use of an atypical linguistic feature or semantic content for a given speaker or addressee can cause processing difficulties. The produced form does not need to constitute a pragmatic violation, it may simply be unexpected or going against conventions or stereotypes. For example, in the study by Jiang et al. (2013), initial processing was disrupted when the addressee was addressed with the over-respectful form, even though this form was eventually re-interpreted as appropriate given a certain context (such as a joke or irony). Lattner & Friederici (2003) and van Berkum et al. (2008) found that processing was disrupted when a person produced semantic content incongruent with what is stereotypically expected of them based on the social category they belong to. For example, Lattner & Friederici (2003) used stimuli such as 'I like to play soccer' uttered by a woman. This sentence clearly does not

constitute any pragmatic violation, and while it goes against stereotypes, it is also not extremely uncommon to come across women who like soccer. Thus, the processing difficulties seem to have come from the fact that the linguistic forms or semantic content were atypical and unexpected, rather than incorrect or impossible. This may also be the case when women are addressed using masculine marking. While addressing women using masculine marking may be a more common occurrence that women talking about liking soccer, it can still be considered atypical, as in the most prototypical cases of addressing (such as face-to-face interactions), feminine marking would need to be used when addressing women. Readers are known to slow down when they encounter unexpected content in a text (e.g. Levy, 2008), which is why we may expect women to slow down if they perceive the use of masculine marking as unexpected.

What differentiates the present study from the mentioned ERP studies, however, is that the female participants may use the situational context in order to form predictions about being addressed using masculine marking. In other words, while overall, feminine marking is likely to be used more often when addressing women than masculine marking, in contexts such as reading experimental stimuli, masculine marking may be more common. This is because the experimental texts can be assumed to be written to address multiple different participants, and there was no indication anywhere that the experiment was only open to female participants. As such, the context represents a scenario where the use of masculine generics *is* relatively typical. However, it is not clear whether people would use such complex situational cues in order to form predictions about the gender marking that will be used, especially since not all second-person texts necessarily contain gender marking. I am not aware of any research that looked into the role of setting in forming linguistic predictions.

If predictions regarding gender marking are not formed from the start, the situational cues may still be activated and used when encountering the masculine gender marking. However, this activation of situational cues and their use to accept and integrate the masculine-marked verbs may require some extra time, and thus result in slower processing compared to when the gender marking matches participant gender or when there is no gender marking.

Moreover, even if women start reading the stories with the situational-based expectation of masculine gender marking, it is possible that this expectation will be lost when, and if, they

become immersed in the narratives. Immersion[3] has been defined in the literature as a process in which "all mental systems and capacities become focused on the events in the narrative" (Green & Brock, 2000, p. 701). When immersed, participants may have the illusion of being personally addressed, which in turn may give preference to a prediction for gender marking that matches the addressee's gender. Being immersed in the stories may also mean that people are not very aware of their surroundings, which is one of the defining processes underlying immersion (e.g., Green & Brock, 2000). This could make the situational context less immediately available for the female participants when encountering the masculine gender marking.

*4.2.2 Reduced mental simulation as a possible cause for slower reading*

There is also a possibility that women may slow down when addressed using masculine marking even if they do not experience processing difficulties. One possible reason for slower reading may be reduced mental simulation when addressed using masculine marking. While literature on this topic is too scarce to make any predictions with confidence, there are two studies that are worth mentioning. Mak and Willems (2019) found that narrative passages that contained descriptions of actions, assumed to trigger mental simulations, were read faster than other narrative passages. As discussed in chapter 3, the degree of mental simulation of described actions was found to be modulated by person marking – second person marking was found to result in the highest chance of mentally simulating the performed actions (e.g. Brunyé et al., 2009). If, however, the role of second person marking in triggering mental simulation is diminished by a gender mismatch, the degree of mental simulation may be decreased in women, which may in turn be reflected in slower reading.

Another reason to speculate that women might slow down in reading due to reduced mental simulation comes from the already mentioned study by Child et al. (2018). The study found that people read second-person stories faster than third-person stories, and were more emotionally affected by them, but only when their emotional content was positive, not negative. The authors interpreted this as the readers resisting the mental simulation of negative events. Thus, it seems that when something prevents the reader from mentally simulating the described events, this may become reflected in slower reading. It is possible that the use of masculine gender marking may

---

[3] Also known by other terms such as transportation (e.g. Green & Brock, 2000) or absorption (e.g. Mak & Willems, 2019)

have this effect on female readers. This could be related to the unexpectedness of masculine marking and difficulties in its processing, or it could also reflect a different process. For example, Katz and Regev (*n.d.*) and Vainapel et al. (2015) speculated that the negative effects of first- and second-person masculine generics in their studies could have been because the masculine marking triggered associations of men, reducing women's sense of belonging. In the context of the present study, activating associations of men could make it more difficult for women to imagine themselves as the protagonist of the stories and mentally simulate its contents.

However, it should be kept in mind that our current understanding of the relationship between mental simulation and reading is not sufficient to be able to interpret the findings of the present study in relation to mental simulation. Nevertheless, it is worth to keep these possibilities in mind and to investigate them in future research.

To sum up, although research on the processing of mismatches between a linguistic feature and speaker or addressee identity is scarce, the existing ERP studies provide some evidence that both men and women may experience processing difficulties when addressed using gender marking that mismatches their own gender. In addition, it is possible that being addressed using gender marking that does not match one's gender may result in reduced mental simulation, which may cause slower reading. However, there is less support for this hypothesis.

In the following section, the research questions and hypotheses of the current study will be described. As we have seen in the introduction, the use of second-person singular verbs in contexts addressing both men and women is common in Polish. This is one of the many examples of using masculine gender marking to refer to women in certain contexts. Studies of third-person masculine generics found that these masculine generic forms carry masculine associations with them, causing them to favour male over female referents. This exclusion of women during the comprehension process may have negative consequences for women, for example when it comes to employment (Horvath & Sczesny, 2016; Vervecken et al., 2013). Outside of the third person, two studies found that first- (Vainapel et al., 2015) and second- (Katz & Regev, *n.d.*) person masculine generics may also have negative consequences for women. However, neither of them applied an online processing method, and as such the processes that may underly the found effects are not clear. The aim of the present study is thus to extend the research on non-third person masculine generics and to apply an online processing

method. Masculine generics in the second person, specifically, were chosen as the topic of the current research, because of its reported impact on the reader, compared to the first or third person. In addition, women's processing of being addressed using masculine marking will be compared to men's processing of being addressed using feminine marking, which constitutes a pragmatic violation. This comparison is especially important because of the scarce research on the processing of mismatches between a linguistic feature and addressee or speaker identity, which means that we cannot assume that even a mismatch that constitutes a pragmatic violation will negatively affect reading. Nevertheless, several existing ERP studies do suggest that both men and women may experience processing difficulties when addressed using gender marking that mismatches their gender.

## 5. Current study and hypotheses

The aim of the current study can be summarised by the following research question: Is Polish speakers' reading speed negatively affected when they are addressed using a second-person singular verb with gender marking that mismatches their own gender? This question can be divided into two sub-questions: 1) Is women's reading time negatively affected when they are addressed using a second-person singular verb with masculine gender marking, even in contexts where the use of masculine marking is considered appropriate?, and 2) Is men's reading time negatively affected when they are addressed using a second-person singular verb with feminine marking, which is never appropriate when addressing men?

A self-paced reading experiment has been conducted in order to answer this question. In this experiment, participants were shown three-sentence stories, such as the one in Example 7.

7) Wyobraź sobie, że wyprowadzasz się do Norwegii na pół roku. Gdy już sprawdziłeś dojazd na lotnisko, zamierzasz pożegnać się z rodziną. Jednak w tym momencie babcia zaczyna pakować ci zapasy jedzenia do walizki.

'Imagine that you are moving to Norway for half a year. Once you checked the transport to the airport, you want to say goodbye to your family. But in that moment, your grandmother starts to pack food into your suitacase.'

The first verb of the second sentence (e.g., *sprawdziłeś* 'arranged') was manipulated between a past tense verb with masculine marking, a past tense verb with feminine marking, and a control gerund verb which requires no gender marking. Participants read the stories in segments: the first sentence of the story was shown as a whole, but the rest appeared one word at a time. This way, the reading time of each word could be measured, and the time it took to read the verb in the three versions could be compared.

Based on the reasoning described in the previous chapter, I hypothesised that both men and women would read the verbs with gender marking mismatching their own gender slower than the gerund verbs with no gender marking. However, I expected that the increase in reading time would be larger for men, as using feminine marking to address men would be very unexpected, and because it constitutes a pragmatic violation.

The following chapters will describe the method (chapter 6), followed by the results (chapter 7), and the discussion (chapter 8).

## 6. Method

### 6.1 Participants

In total, 88 Polish-speaking participants (34 men) were tested in a self-paced reading experiment. They were recruited through various means, such as personal contacts, announcements within the university, or posters hung in shops and cafes in the city. The participation requirements were to be a native Polish speaker, to not have dyslexia or other reading problems, and to be between 18 and 40 years old. Additionally, an exclusion criterion of answering at least 75 % of the comprehension questions correctly was applied. Each participant received a coupon to a chain of bookstores worth 25 złotych (approximately 6 euros).

### 6.2 Materials

#### 6.2.1 Stimuli

62 stimuli were constructed. A glossed example of a stimulus in the version with masculine gender marking can be seen in Table 1. Additionally, the beginning of the second sentence in all versions is shown in Table 2. A full set of the stimuli (in the version with masculine gender marking) can be found in Appendix A. Each stimulus consisted of three sentences. The first sentence always started with the phrase *Wyobraź sobie, że...* 'Imagine that…' and a second person singular verb. This sentence introduced a certain event that the participant was asked to imagine themselves to be participating in. The second sentence contained the verb with the manipulated gender marking. In the experimental versions (with gender marking), the second sentence opened with *Gdy już* 'Once' followed by a second person singular past tense verb (e.g. *zjadłeś* 'ate-2SG.M'). The crucial verb was always followed by a noun (e.g., *ciasto* 'cake'), a preposition (e.g., *ze* 'with'), another noun (e.g., *śliwkami* 'plums'), the second person singular present tense verb *zamierzasz* 'want/intend', and an infinitive verb (e.g., *zamówić* 'order'). In the control version, a gerund verb was used instead of a past tense verb, and *Gdy już* 'Once' was replaced by *Po* 'After'. Additionally, the noun following the verb changed its case marking from accusative to genitive in the control version. The third sentence always opened with *Jednak w tym momencie…* 'But in that moment…' and introduced an unexpected event which served to round up the story and give it structure.

*Table 1. A glossed example of a stimulus in the version with masculine gender marking. The rough translation of the text is: 'Imagine that you are sitting at a cafe not far from home. Once you ate the plum cake, you want to order one more coffee. But in that moment, you realise that this would be your fifth coffee of the day.'.*

| *Wyobraź* | *sobie,* | *że* | *siedzisz* | *w* | *kawiarni* | *niedaleko* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | sit-2SG | in | cafe | near |
| *domu.* | *Gdy* | *już* | *zjadłeś* | *ciasto* | *ze* | *śliwkami,* |
| home | When | already | ate-2SG.M | cake | with | plums |
| *zamierzasz* | *zamówić* | *jeszcze* | *jedną* | *kawę.* | *Jednak* | *w* |
| want-2SG | order-INF | still | one | coffee | However | in |
| *tym* | *momencie* | *orientujesz* | *się* | *że* | *to* | *by* |
| this | moment | realise-2SG | REFL | that | COP | COND |
| *była* | *już* | *twoja* | *piąta* | *kawa* | *tego* | *dnia.* |
| was | already | your | fifth | coffee | this | day |

*Table 2. The beginning of the second sentence of a stimulus in versions with masculine, feminine, and no gender marking.*

| **Feminine** | *Gdy,* | *już* | *zjadłaś* | *ciasto* | *ze* | *śliwkami* |
|---|---|---|---|---|---|---|
| | When | already | ate-2SG.F | cake-ACC | with | plums |
| **Masculine** | *Gdy* | *już* | *zjadłeś* | *ciasto* | *ze* | *śliwkami,* |
| | When | already | ate-2SG.M | cake-ACC | with | plums |
| **Control** | *Po* | *zjedzeniu* | *ciasta* | *ze* | *śliwkami* | |
| | After | eating-LOC | cake-GEN | with | plums | |

### 6.2.2   Stimuli pre-test

The stimuli were pre-tested in order to check to what extent their content evokes gender stereotypes. If the scenarios described actions that were more associated with one gender or the other, this could negatively affect men or women's engagement in the stories, as well as their ability to picture themselves as the protagonist. The intention was to select 48 out of the 62 stimuli with the most gender-neutral ratings based on the pre-test.

The gender-stereotypicality of the stimuli was measured using an online survey. The control versions of the stimuli were re-written in the first person, and the respondents were told that each of the stories is told by a different person. Their task was to indicate on a 7-point scale how likely they thought each story was to be told by a man or a woman. Figure 1 shows an example of an item from the survey.

Biorę udział w lekcji snowboardu. Po przywiązaniu butów do deski, zamierzam dołączyć do reszty grupy. Jednak w tym momencie podjeżdża do mnie para narciarzy, którzy potrzebują pomocy w znalezieniu swojego hotelu.

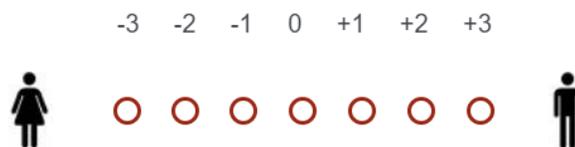$$-3 \quad -2 \quad -1 \quad 0 \quad +1 \quad +2 \quad +3$$

*Figure 1. Example of a pre-test survey item. The text is a control version of a stimulus re-written to the first person and can be translated as: 'I am taking part in a snowboarding lesson. After tying my shoes to the board, I want to join the rest of the group. But then a couple of skiers who need help in finding their hotel come up to me.'*

In addition, 12 filler items describing stereotypically female activities, and 12 items describing stereotypically male activities, were constructed and included in the pre-test.

Scale direction was counter-balanced: for half of the participants, -3 corresponded to the most feminine rating and +3 to the most masculine rating, and for the other half the direction was reversed. It was ensured that male and female respondents were equally distributed between both versions. The order in which the items were shown was randomised for each participant.

Participants were recruited using personal contacts. In total, 35 female, 20 male, and 1 non-binary Polish native speaker completed the survey. The non-binary respondent's data was excluded, as the comparison between women and men is of crucial interest to the present study. One male and one female respondent were excluded due to a suspicious response pattern. One respondent only used the two furthest points of the scale (-3 and +3). The other participant answered seemingly at random: there was no significant difference in her mean ratings of the

stereotypically masculine and stereotypically feminine fillers ($t(22) = 1.67$). Moreover, the standard deviation of her responses to all items was high ($SD = 1.8$), suggesting that the lack of significant difference was not due to a preference for very neutral ratings. There were two other participants who did not give significantly different ratings for the stereotypically masculine and feminine items. However, it was decided to keep their data because there was not enough evidence that this was due to a random response pattern. Namely, for one of the participants, this lack of significant difference was likely due to a preference for very neutral ratings. There were only three items which she gave a rating other than 0 (the most neutral rating). All three were gender stereotypical fillers, and all received a rating congruent with the stereotype. The ratings of the other participant, despite quite high variation in his responses, followed the basic expected pattern of more neutral ratings for the experimental items, and less neutral and congruent with the stereotype ratings for the fillers. After excluding the two participants with a suspicious response pattern, the data of 10 additional female participants was excluded in order to obtain a more gender-balanced sample. This exclusion was done based on recency of responses – the 10 most recent responses from women were removed.

The exclusion process resulted in a sample of 24 women and 19 men between the ages of 18 and 46. The majority, 26, of the respondents were not students, while the reverse trend was expected in the self-paced reading experiment sample. However, student status did not seem to affect participants' mean ratings (students: $M = 3.92$, $SD = 1.08$; non-students: $M = 3.9$, $SD = 1.25$; $t(41) = .05$). Most of the participants were highly educated – 27 indicated to have completed higher education, and most of those who did not were students.

The data of the respondents who saw the male-left scale was converted to match the responses on the female-left scale. After the conversion, 1 corresponded to the most feminine rating, and 7 to the most masculine rating. Table 3 shows the mean ratings and standard deviations for the experimental items and the fillers. The mean ratings of the experimental items ranged from 2.88 to 5.01. There was a slight skew towards more ratings to the left of the scale (more feminine) compared to the right (more masculine).

*Table 3. Mean rating and SD of the experimental and filler items from the pre-test.*

|  | Experimental | Stereotypically feminine fillers | Stereotypically masculine fillers |
|---|---|---|---|
| Mean | 3.91 | 2.35 | 5.57 |
| SD | 1.19 | 1.33 | 1.34 |

In order to select 48 stimuli, the first step was to exclude items with the highest SD (higher than 1.3). Out of the remaining items, 24 items with a mean rating lower than and closest to 4, and 24 items closest to 4 with a mean rating of 4 or higher were selected. This resulted in 48 items with a mean rating of 4 and a standard deviation of 0.34, with mean ratings ranging from 3.42 to 4.88. Based on this selection criteria, one item which was intended to be stereotypically masculine, but which received the mean rating of 4.05, ended up in the final selection[4].

### 6.2.3 Regions of interest

The past tense (in the experimental versions) and gerund (in the control version) verbs were defined as the main regions of interest. These verbs ranged in length between 7 and 12 characters. The length of the gerund version of the verb was almost always the same as the past tense version, but for some verbs it differed by one or two characters. For the past tense verbs, the difference between the masculine and feminine marking was almost always only in the second to last vowel (*a* in the feminine version, *e* in the masculine version). However, three verbs had an additional difference in the fourth to last vowel (*ę* in the feminine version, *ą* in the masculine version). Because the self-paced reading method is subject to spillover effects (Mitchell, 2004), analysis was also conducted on the noun following the verb. The noun ranged from 4 to 11 characters long.

### 6.2.4 Fillers

In addition to the 48 stimuli, 48 fillers were created. Examples of the fillers are shown in Table 4. Eighteen of those fillers were also asking the participant to imagine themselves as a protagonist in a certain scenario. What differentiated these fillers from the experimental items

---

[4] This was stimulus number 47 in Appendix A.

were the second and third sentences. In the experimental items, the second sentence contains the region of interest, making it the most crucial sentence of the stimulus. However, from a reader's point of view, the second sentence is not the most prominent one – it describes an already completed action and a plan for a subsequent action, neither of which are very surprising or unusual given the type of event introduced in the first sentence. Only in the third sentence something unexpected happens. This introduces the risk that the participants might learn that the second sentence is the least crucial one to the story and might begin to read it less carefully. That is why in the eighteen fillers, it is the second sentence that contains an unexpected event.

The remaining 36 fillers also asked the participant to imagine something, but only from the point of view of an observer rather than an actor. In other words, the participant was asked to imagine a scenario, but the scenario did not involve them doing anything. The role of these fillers was to give the participants a break from imagining themselves doing something. Imagining oneself doing something may be a mentally taxing task, and having to do it non-stop for 96 items could run the risk of the participant simply deciding to stop doing it. Introducing fillers that do not require the participant to imagine themselves as doing something – but that are still very similar to the experimental items - was done with the intention of lowering that risk.

*Table 4. Examples of fillers.*

| Type of filler | Example 1 | Example 2 |
|---|---|---|
| Participant as protagonist | Wyobraź sobie, że próbujesz zasnąć późnym wieczorem. Nagle słyszysz odgłosy dobiegające z korytarza. Gdy wychodzisz z sypialni, widzisz, że po twoim mieszkaniu biegają myszy.<br><br>'Imagine that you are trying to sleep late in the evening. Suddenly you hear sounds coming from the corridor. When you exit the bedroom you see that there are mice running around your flat.' | Wyobraź sobie, że spacerujesz po centrum miasta w słoneczny dzień. Nagle zauważasz coś błyszczącego na chodniku. Gdy przyglądasz się bliżej, widzisz, że to antyczna złota moneta.<br><br>'Imagine that you are walking around the city centre on a sunny day. Suddenly you see something shiny on the ground. When you look closer you see that it is an antique golden coin.' |
| Participant as observer | Wyobraź sobie sklep zoologiczny w małym mieście. Jest kilka minut po otwarciu i nie ma jeszcze prawie żadnych klientów. Tylko mała dziewczynka przyszła z rana popatrzeć na króliki.<br><br>'Imagine a pet shop in a small town. It is a few minutes after opening time and there are almost no clients yet. Only a small girl came so early to look at the rabbits.' | Wyobraź sobie długi korek na autostradzie. Jest pierwszy dzień długiego weekendu majowego. Wiele osób wybierających się na urlop żałuje, że nie wyjechało wcześniej rano.<br><br>'Imagine a long traffic jam on the highway. It is the first day of the long May weekend. Many people going on holiday are regretting that they did not leave earlier in the morning.' |

### 6.2.5 Additional tasks

A comprehension task was introduced after one quarter of texts in order to ensure careful reading. The task consisted of indicating whether a statement relating to the previous item is

correct or incorrect. For example, following the stimulus shown earlier in Example 7, participants had to respond to the following statement: *Żegnasz się z rodziną na lotnisku.* 'You are saying goodbye to your family at the airport'.

Additionally, after another quarter of items, participants had to complete an image task. A pair of images related to the content of the previous text were shown on the screen. An example of such an image pair can be seen in Figure 2. The task of the participant was to choose the image that reflected more accurately what they imagined while reading that text. The primary goal of the image task was to increase engagement in the stories and to further encourage the participant to imagine themselves in a given situation. This was done in order to increase the chance of the participant self-ascribing the second-person reference at the beginning of each stimulus scenario. While Wechsler (2010) argues that self-ascription of second-person reference is automatic, this claim has not been thoroughly tested, and it is especially not known to what extent self-ascription would take place when reading experimental texts in a lab setting. If self-ascription does not take place, any effect of gender mismatch may not become visible – if people do not identify with the referent, we cannot exactly speak of a mismatch between the referent gender and gender marking on the verb. Additionally, the goal of the task was to mimic real-world contexts of being addressed. Usually, people are being addressed with a certain goal – such as making them do, think or feel something. Introducing the image task functioned as the goal to being addressed. Participants were asked to imagine something so that later they could complete the picture task based on what they imagined. Mimicking real-world contexts of being addressed was hoped to also result in reading patterns closer to those occurring in everyday contexts. Introducing the image task was also hoped to divert the participants' attention from the purpose of the experiment which had nothing to do with the images.

Figure 2. A pair of images shown after a story featuring a dog.

**6.3 Design**

Table 5 shows the design of the experiment.

*Table 5. The design of the self-paced reading experiment.*

| Block 1 | | Block 2 | |
|---|---|---|---|
| Number | Type of text | Number | Type of text |
| 12 | Masculine gender marking on verb | 12 | Feminine gender marking on verb |
| 12 | No gender marking on verb | 12 | No gender marking on verb |
| 24 | Fillers | 24 | Fillers |

As can be seen in Table 5, all of the experimental items with masculine gender marking were shown before all of the ones with feminine marking. The reason for this is that the reverse order might result in a loss of the gender-inclusive interpretation of the masculine gender marking. In other words, if women are addressed using masculine gender marking after being addressed using feminine marking, they might not interpret the use of the masculine gender as appropriate anymore. Firstly, there are few plausible scenarios in which a shift from feminine to masculine gender marking would take place without any apparent reason. This shift may not go unnoticed

by the participant, perhaps causing them to perceive the introduction of the masculine gender marking as confusing or wrong. This clearly does not constitute a scenario where the use of masculine gender marking to address women is seen as appropriate. Secondly, even if the participants do not consciously perceive the masculine gender marking as strange, the contrast with the previously used feminine marking may unconsciously strengthen the associations of the masculine gender marking with men, making the verbs less likely to be interpreted as gender-inclusive. This is in line with a study by Gygax and Gabriel (2008) who found that more male bias was associated with masculine role nouns in French (e.g. *musiciens* 'musicians-M') when the participants were previously presented with feminine nouns (e.g. *musciennes* 'musicians-F'). As the purpose of the experiment is to find out how women process being addressed with verbs with masculine marking when such marking is appropriate, it is necessary to make sure that the use of the masculine marking will be interpreted as such. By contrast, presenting feminine-marked items after those with masculine gender marking does not present any substantial problem. As feminine marking is never appropriate when addressing men, it should not matter whether it is preceded by masculine marking or not. There is a possibility, though, that the introduction of feminine marking may also slow down women's processing, if they notice the sudden change in the gender marking. However, they may quickly accept the feminine marking after the first (few) item(s) containing it, so this possible surprisal effect may not necessarily be reflected in the mean reading time of all feminine-marked items in the block. Even if it is, though, the effect is likely to be smaller than that on men's reading time, given that men should have more trouble accepting and integrating the feminine gender marking since it constitutes a pragmatic violation for them.

Four lists of stimuli were created. In each list, different sets of items were used as the stimuli with feminine marking, stimuli with masculine marking, control items of block 1, and control items of block 2. In other words, each item belonged to only one of these four groups within a list, and it belonged to a different group in each list. An equal number of male and female participants were assigned to each list. The fillers were randomly assigned to each block (ensuring that the two types of fillers are equally divided between blocks) and the same fillers were always shown in each list. The order of items within blocks was pseudorandomized according to the following constraints: maximum of three experimental items in a row, maximum of five fillers in a row, at least two other items between two items with gender

marking, at least one other item between two control items, no more than three questions (i.e., image task or comprehension task) in a row, no more than two questions of the same type (image or text) next to each other.

## 6.4    Procedure

The experiment was conducted at the Institute of English Studies of the University of Wrocław in Poland. Participants were tested in a closed, though not soundproof, room. I was present in the room during the experiment and was seated approximately 2 metres away from the participant, facing them at an approximately 45 degree angle. In order to avoid making the participant feel watched, I made sure to quietly do things on my laptop or phone.

The experiment was conducted on a Dell laptop with a screen resolution of 1920x1080. For both the stimuli and the fillers, the first sentence was presented on the screen as a whole, and the rest of the text was presented one word at a time. A centred, non-cumulative display was used, meaning that each word was replaced by the next one in the centre of the screen. Stimuli were presented with a white font on a black background. The font used was Deja Vu Sans Mono size 32. The stories were separated by a fixation cross which stayed blue for the first 300 ms before turning white. Only when the cross turned white, the participants could press a button to move on to the next story. A button box was used to collect responses. Two buttons at the bottom of the button box were used to collect reading times – the left button was used for right-handed participants, and the right one for left-handed participants. This was so that the participant could use the button closest to their dominant hand when the button box was lying on the side of the table that matched their dominant hand. Two buttons higher up on the box were used to collect responses to the image and comprehension tasks.

Each participant was tested individually. After they entered the room, they were given an information document and asked to sign a consent form. They were then presented with short instructions on the screen. After that, I showed them two practice items while repeating and elaborating on the instructions. It was stressed to them that it is important to really imagine that they are doing or observing something while reading the stories. Next, the participant was presented with three practice items to go through on their own. They were also told that they can adjust the position of the chair, the monitor, and the button box to find the most comfortable position. In order to reduce variation in the button press times not related to the experimental

conditions, participants were instructed to always use the index finger of their dominant hand to press the button, as well as to maintain more or less the same hand and finger configuration throughout the experiment. After the practice block was over, the participant was given a chance to ask any further questions before beginning with the main part of the experiment.

There were three breaks built into the experiment. A longer break took place in between the first and the second block. Additionally, two shorter breaks were scheduled halfway through each block. After the experiment was over, the participants were given an exit questionnaire as well as the coupon. The exit questionnaire collected demographic data, as well as probed the participant to guess the purpose of the experiment. The median duration of the whole procedure, from the moment the participant entered the room until they exited it, was 50 minutes ($M = 52$, $SD = 10.78$).

## 7. Results

The data of six participants were excluded from the analysis. One participant was excluded because he was not a native Polish speaker. Another one was given a faulty version of the stimulus file, in which some of the experimental items were shown twice. In addition, after checking the answers to the comprehension questions, four additional participants were excluded because they answered less than 75 % of the questions correctly. The remaining sample consisted of 82 native Polish speakers (32 men) between the ages of 18 and 31 ($M = 22.56$, $SD = 2.76$). The majority (68) of the participants were students. Out of those who were not students, most (10) have completed higher education. None of the participants have managed to guess the purpose of the experiment.

Before performing the analysis, all data points reflecting reading times on the verb or noun shorter than 150 ms or longer than 3000 ms were removed. Responses quicker than 200 ms in self-paced reading experiments are considered to be most likely caused by unintentional button presses (Jegerski, 2014). An upper cutoff 3000 ms has been previously applied in self-paced reading studies (Havik, Roberts, van Hout, Schreuder, Haverkort, 2009; Roberts & Felser, 2011). The removal of extreme data points resulted in the loss of 0.003 % data points for both the verb and the noun. The remaining data were log-transformed in order to achieve a normal distribution of the data.

The reading times of the verb and the noun were modelled using a linear mixed model constructed in R (R Core Team, 2018) using the lme4 package (Bates, Maechler, Bolker & Walker, 2015). Block, gender marking, participant gender, as well as their interactions were entered as fixed effects. The levels of the factors were coded using sum contrasts. Table 6 shows the codes that were used. Participant and item were entered as random effects. A full random structure was initially used, but this resulted in the model failing to converge. The model was simplified by suppressing the correlation parameters, and then gradually removing smallest variance components until the model successfully converged. As a result, the random slopes that were used in the final models were block as a random slope for participant, and, only in the noun model, the interaction between gender marking and participant gender as a random slope for item. T-values and p-values were calculated for each of the coefficients. P-values were obtained based on the z-distribution. However, there is no consensus about how to calculate p-values of a

linear mixed model. For that reason, statistical significance was evaluated based on the t-values, with values higher than 1.96 indicating significance. The next sections report the descriptive statistics and the model output for the verb, and then for the noun. The full output of the linear mixed models can be found in Appendix B.

*Table 6. Codes assigned to the levels of fixed factors.*

| Factor | Codes | |
| --- | --- | --- |
| | **-1** | **+1** |
| Block | 1 (masculine gender marking) | 2 (feminine gender marking) |
| Gender marking | Unmarked | Marked |
| Participant gender | Male | Female |

**7.1 Main region of interest: verb**

Table 7 shows the mean and standard deviations of the reading times of the verb across the levels of the fixed factors.

*Table 7. Mean reading times (in ms) of the verb.*

| | **Female participants** | | | | **Male participants** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | **Block** | | | | **Block** | | | |
| **Gender marking** | **1** (masc. marking) | | **2** (fem. marking) | | **1** (masc. marking) | | **2** (fem. marking) | |
| | *M* | *SD* | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| **yes** | 650 | 400 | 491 | 285 | 573 | 305 | 545 | 346 |
| **no** | 661 | 393 | 515 | 302 | 606 | 319 | 522 | 276 |

The output of the linear mixed model revealed an unsurprising main effect of block: participants read faster in the second block compared to the first ($\beta$ = -0.09, *SE* = 0.01, *t*=-7.43, *p* < .0001). There was also a main effect of gender marking: verbs with gender marking (second person past tense verbs) were read faster than the gerund verbs without gender marking ($\beta$ = -0.02, *SE* = 0.01, *t*=-3.15, *p* = .002). Additionally, there was a two-way interaction between block and

participant gender (β = -0.03, *SE* = 0.01, *t*=-2.87, *p* = .004): while both men and women read faster in the second block, this difference was larger for female, compared to male participants. In other words, the increase in reading speed between block 1 and block 2 was larger for the female participants, for whom the transition between block 1 and block 2 meant going from being addressed with the gender marking that was predicted to be more difficult for them (masculine marking) to being addressed with the gender marking that was predicted to be easier for them (feminine marking). For the male participants, who were transitioning from being addressed with the hypothetically easier gender marking (masculine) in block 1 to the more difficult (feminine) gender marking in block 2, this increase in reading time was not as large.

Finally, there was a three-way interaction between gender marking, block and participant gender (β = -0.01, *SE* = 0.01, *t*=-2.29, *p* = .02). This interaction showed that the effect of gender marking was different for men and women across blocks. Figure 3 shows the mean reading times across conditions, which helps us to understand this interaction effect. We can see that while there was an overall effect of verbs with gender marking being read faster than verbs without gender marking (the main effect), this effect was more pronounced when the gender marking matched the participant gender, so in block 1 for men, and in block 2 for women. A three-way interaction of this nature was not predicted by the hypothesis. What was hypothesised was that verbs with gender marking *mismatching* the participant gender would be read *slower* than the control verbs with no gender marking. However, as we can see in Figure 3, there was very little difference in the reading times between those verbs and the control verbs. Instead, there is a difference between the control verbs and the verbs with gender marking *matching* the participant gender – the latter were read quicker.

What can also be seen from the bar plot in Figure 3, is that the two-way interaction between block and participant gender still holds when we take into account gender marking – across all levels of gender marking, the decrease in reading time between block 1 and block 2 was larger for female, compared to male, participants. We can also see that in block 1, women read slower than men, while in block 2, it was the other way around.

*Figure 3. Mean reading time of verbs with and without gender marking across conditions. Error bars represent 95 % confidence intervals.*

## 7.2 Spillover region: noun

Table 8 shows the mean and standard deviations of the reading times of the noun across the levels of the fixed factors.

*Table 8. Mean reading times (in ms) of the noun following the verb.*

| Gender marking | Female participants | | | | Male participants | | | |
|---|---|---|---|---|---|---|---|---|
| | Block | | | | Block | | | |
| | 1 (masc. marking) | | 2 (fem. marking) | | 1 (masc. marking) | | 2 (fem. marking) | |
| | M | SD | M | SD | M | SD | M | SD |
| **yes** | 661 | 408 | 527 | 318 | 603 | 342 | 556 | 317 |
| **no** | 666 | 425 | 488 | 261 | 626 | 366 | 528 | 262 |

The output of the linear mixed model for the noun also revealed a main effect of block: participants read faster in the second block ($\beta = -0.09$, $SE = 0.01$, $t = -8.29$, $p < .0001$). A two-way interaction between block and participant gender was found again as well: the difference in reading speed between the two blocks was more pronounced for women than for men ($\beta = -0.03$, $SE = 0.01$, $t = -2.9$, $p = .004$). Additionally, a two-way interaction between gender marking and block, which had not been found for the verb, was found ($\beta = 0.02$, $SE = 0.005$, $t = 3.14$, $p = .002$). It shows that on average there was a tendency for the nouns following verbs with masculine marking (block 1) to be read faster, while nouns following verbs with feminine marking (block 2) were read slower than the control verbs. A three-way interaction between participant gender, block, and gender marking was not found for the noun. This is illustrated in Figure 4. We can also see that the effect of verbs with masculine marking being read faster than the control verbs was mainly carried by the male participants, but this is not borne out statistically as the interaction effect between participant gender and gender marking is not significant ($\beta = 0.01$, $SE = 0.01$, $t = 1.16$, $p = 0.25$).
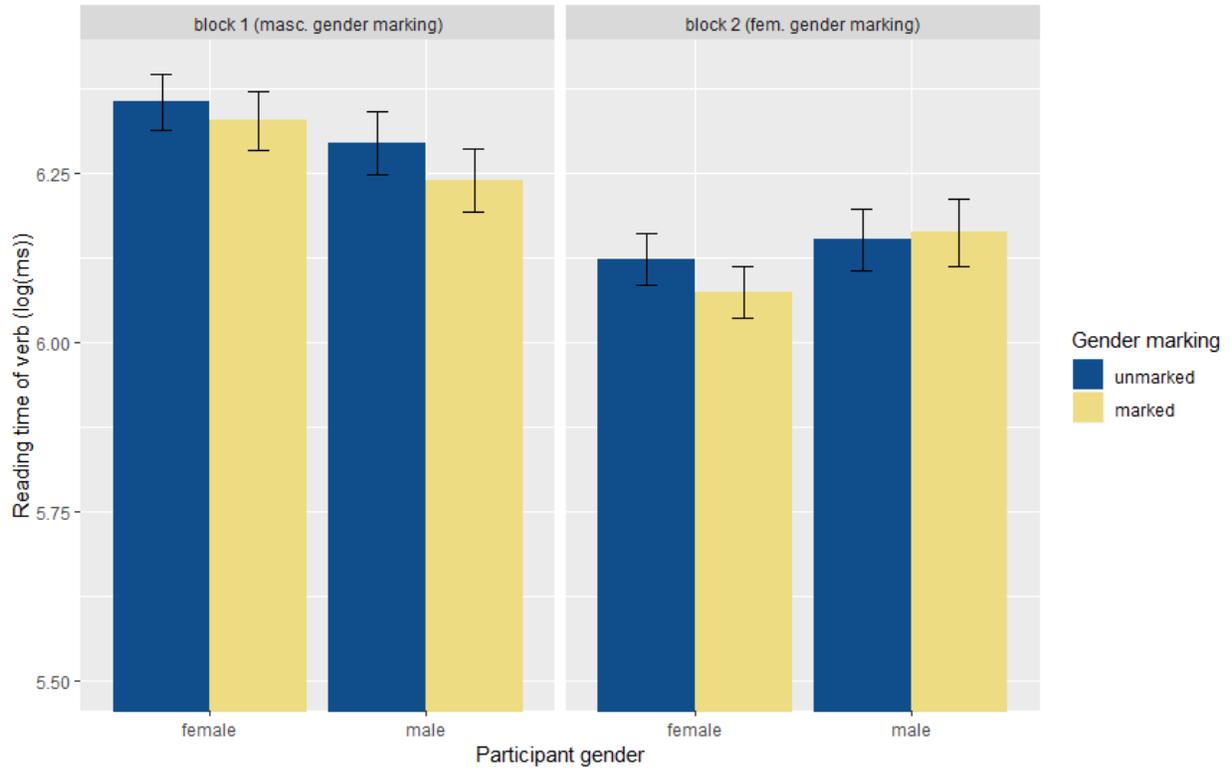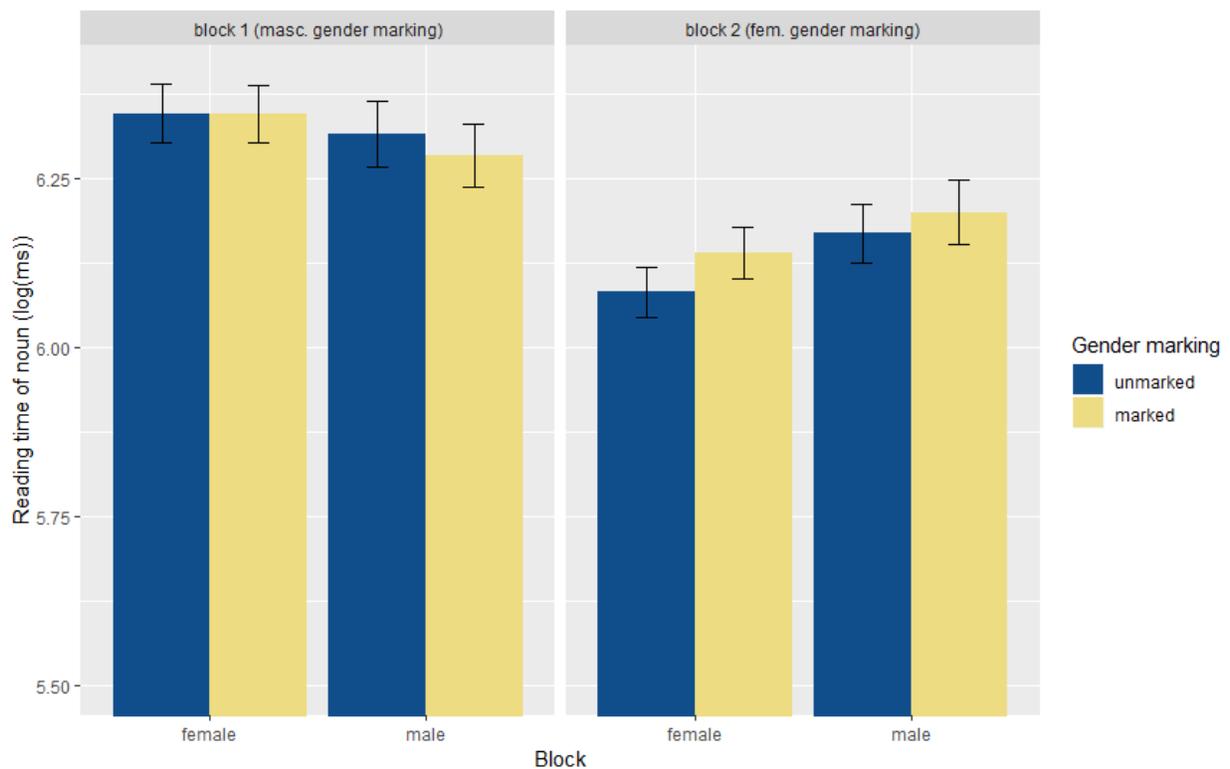


*Figure 4. Mean reading time of noun following verbs with and without gender marking across conditions. Error bars represent 95 % confidence intervals.*

To summarise the results, a main effect of block, and a two-way interaction between block and participant gender were found for both the verb and the noun. Both men and women read faster in block 2 than in block 1, but the increase in speed was larger for women, who went from being addressed using gender marking *mismatching* their gender to gender marking *matching* their gender. For the verb, there was also a main effect of gender marking: verbs with gender marking were read generally faster than those without gender marking. There was also a three-way interaction between participant gender, block, and gender marking. The advantage of verbs with gender marking compared to those without was larger when the gender marking matched participant gender (men in block 1, women in block 2). For the noun, these two latter effects were not found. Instead, a two-way interaction between gender marking and block was found: nouns following verbs with masculine marking were read faster than the control nouns, but nouns following verbs with feminine marking were read slower than the control nouns by both men and women. The results will be discussed in relation to the hypotheses in the next chapter.

## 8. Discussion

The aim of the self-paced reading experiment was to find out whether Polish speakers experience a processing cost, reflected in slowed down reading, when addressed using verbs with gender marking that mismatches their own gender. For the female participants, the question was specifically whether they would experience a processing cost in a context where the use of masculine gender marking to address them is appropriate, i.e., it constitutes a masculine generic. It was hypothesised that the verbs with gender marking mismatching the participant's gender would be read slower than the gerund verbs with no gender marking. Moreover, this difference was hypothesised to be larger for the male participants, as addressing men using feminine marking is never appropriate. However, these hypotheses were not supported. Instead, no difference in the reading time of the gender-mismatched and the control verbs was found, but the verbs with gender marking *matching* participant gender were found to be read faster than the control verbs. However, it is still possible that this pattern of results could be reflecting the hypothesised effects, though further research is needed. In this chapter, the results are discussed in relation to the hypotheses, and the possibility that they may still reflect the hypothesised effects is addressed.

### 8.1 Effects found on both the verb and the noun

Starting with the effects that were found both on the main region of interest (verb) and the spillover region (noun), there was a main effect of block, as well as a two-way interaction between block and participant gender. Reading was overall faster in block 2, most likely reflecting a practice effect. A two-way interaction between participant gender and block revealed that this increase in reading speed between block 1 and block 2 was larger for women. This could mean that, for whatever reason, practice effects are stronger for women. However, another possible explanation for this finding is that it reflects the different effects of gender marking on men and women in each block. For women, the transition between block 1 and block 2 represented going from being addressed with the gender marking that was expected to be more difficult for them to process (masculine) in block 1, to the one that was expected to be easier to process (feminine) in block 2. Therefore, while reading was generally slower in block 1, it could have been even slower for women due to the presence of verbs with masculine marking. Similarly, while reading was generally faster in block 2, it could have been even faster for

women because of the presence of feminine gender marking. This could explain the larger difference in the reading times between the two blocks for women compared to men. For men, the opposite could hold true: while reading was generally slower in block 1, it could have been not as slow for them due to the presence of masculine gender marking. In block 2, while reading was generally faster, the reason why it was not as fast for men could have been due to the presence of feminine gender marking.

Thus, this interaction effect could be partially in line with the hypothesis that gender mismatch on verbs slows down processing. However, even if the two-way interaction can be attributed to gender marking, it cannot tell us whether the effect is due to a gender mismatch slowing down processing, a gender match speeding it up, or both. In addition, it is not clear whether this effect could be attributed to both men and women, only men, or only women being affected by gender marking. For example, it could be that either men's or women's difference in reading time between block 1 and block 2 is the difference we would expect if gender marking had no effect, and that only one of the genders deviates from this expected difference due to the gender marking (mis)match. Another important characteristic of the two-way interaction, which prevents us from interpreting it as in support of the hypothesis, is that it holds for both experimental and control items.

The fact that the two-way interaction holds for both the experimental and the control items could potentially indicate that a gender (mis)match has a more global effect on reading time than solely on the verb itself, i.e., that it slows down or speeds up reading across the whole block. This, however, is not something that was hypothesised. Furthermore, if this were the case, it would suggest that the effect of gender marking on reading cannot only be attributed to processing ease or difficulty, as a processing effect would be very unlikely to continue for so long to appear in the next stimulus. It is not clear what this potentially long-lasting effect of gender marking could be attributed to instead. There are many potential possibilities, but most of them cannot be backed up with previous research. For example, it could be that a gender mismatch reduced the extent of mental simulation across the whole block, which resulted in slower reading. However, as mentioned in chapter 4, the current research on the relationship between reading and mental simulation is not sufficient to be able to safely draw conclusions about mental simulation from reading time data. This is especially so because the studies that do provide tentative evidence for

this connection (Child et al. 2018; Mak & Willems, 2019) only looked at it on the word or sentence level. Therefore, we cannot assume based on their findings that the effect of verb gender marking on mental simulation would persist across different stimuli in a block.

In short, while the two-way interaction between participant gender and block could be attributed to a gender marking effect, it cannot tell us anything about the nature or source of this effect. Moreover, there could also be another reason for the two-way interaction, such as women being more affected by practice effects.

## 8.2 Effects found only on the verb

There were two effects that were found only on the verb, but not on the spillover region. There was a main effect of gender marking - the gerund verbs without gender marking were read slower than the verbs with gender marking. However, this difference was most pronounced when the gender marking matched participant gender, as shown by the three-way interaction. In other words, when the gender marking on the verb matched participant gender, the gender-marked verbs were read faster than the control verbs. However, when the gender marking *mismatched* participant gender, there was no difference between the reading times of those verbs and the control verbs.

It is worth addressing possible reasons why there may be no negative effect of a gender mismatch on reading, even though the insignificant finding does not necessarily mean that such an effect does not exist. It could be that readers do notice the gender marking that is used, but, while it may influence their cognition or behaviour (cf. Katz & Regev, *n.d.*), it does not disrupt their reading process. This could be because the text itself does not become ungrammatical or anomalous, whichever gender marking is used. In other words, both versions of the sentence are perfectly acceptable in the Polish language, and the fact that the gender marking mismatches the addressee gender may not in itself make the sentence any more difficult to read. I am not aware of any previous studies on the effect of mismatches between a feature of the text and addressee identity on reading, so it is a possibility that it is simply something that does not affect reading. This interpretation may also suggest that the ERP effects found in the studies on mismatches between linguistic features and addressee or speaker identity were not due to linguistic processing effects. As mentioned, ERP effects may also reflect non-linguistic processes. The N400, for example, has also been found in response to anomalous visual and mathematical

stimuli (Kutas & Federmeier, 2011). It may also be that, following Wechsler's (2010) theory of second person marking triggering self-ascription, the cue towards self-ascription of the second person is so strong that it overrides any gender marking cues. In other words, readers may automatically self-ascribe the second person marking regardless of the gender marking that is used, resulting in no processing difficulties.

What still needs explaining, though, is why a positive effect of a gender match on reading was found. One possible explanation is that the explicit second person marking on the gender-matching past tense verb, compared to the gerund verbs which do mark person, facilitates the establishment of referential coherence, and thus speeds up processing. It may also be that this explicit person marking increases the degree of mental simulation, though, as already stated, this is highly speculative in light of the limited research on the relationship between mental simulation and reading. Note that these explanations indirectly imply that a gender mismatch *does* create a processing disadvantage – only compared to verbs with a gender match - as a similar effect of person marking was not found on the gender-mismatching second-person verbs. This implied disadvantage of verbs with gender marking mismatching participant gender, however, does not seem very large – it simply means that gender-mismatching verbs are read just as slowly as gerund verbs, which, while they may not be associated with very fast processing, are unlikely to disrupt processing in any way.

A related interpretation is that the explicit second person marking does not have any facilitating effect on processing compared to no gender marking, but that there is another factor that creates a baseline difference in how fast gerund versus second-person past tense verbs are read. In other words, it may be that gerund verbs are not the perfect controls for second-past tense verbs. For example, gerund verbs may be used less frequently during addressing compared to second-person past tense, and this frequency effect could contribute to a baseline longer reading time of gerund verbs. If this is the case, the difference in reading time between the gender-marked verbs and the gerund verbs could reflect this baseline reading difference This again would indirectly imply that the gender-mismatching verbs do create a processing disadvantage, as this potential baseline advantage of second-person past tense verbs cannot be seen anymore with the gender-mismatching verbs. However, I am not aware of any research that would test whether such a

baseline difference between gerund and second-person past tense verbs exist, which is why this is a question that would need to be answered through further research.

There may also be an additional (or alternative) explanation for the little reading time difference between the verbs with a gender mismatch and the control verbs. As mentioned in the previous section, the two-way interaction between block and participant gender could imply that gender marking affects the reading time also on the control verbs. If this effect was due to slower reading caused by a gender mismatch (and not faster reading caused by a match), it could explain why we do not see any effect when comparing the mismatching verbs with the control items – the mismatch caused slower reading of both of the forms. However, all of these possible explanations are something that needs to be tested in future research. In particular, it is worth making sure that the baseline reading differences between control and experimental verbs are explored in future studies – an issue that will be further addressed in section 8.6 on limitations and future research directions.

## 8.3 Effect found only on the noun

The main effect of gender marking and the three-way interaction disappeared on the spillover region. Instead, a two-way interaction between gender marking and block was found. It shows that nouns following verbs with masculine gender marking were read faster than the control nouns, while nouns following verbs with feminine gender marking were read slower than the controls. For women, this is the reverse effect from the one that was observed on the verb, which they read faster when it had feminine marking.

A possible explanation for this effect is that feminine marking may not cause any initial processing difficulties for men nor for women, perhaps because it does not render the sentence ungrammatical nor anomalous. It may even speed up processing for women, as suggested by the three-way interaction on the verb. However, even if it does not cause immediate processing difficulties, the sudden appearance of feminine marking in block 2 may be surprising for both male and female participants. Thus, while they may process and integrate it automatically, they may then pause to wonder why feminine marking was used, which would then be reflected through slower reading on the noun.

The fact that there is no one clear interpretation of the effect found on the verb, however, makes it difficult to interpret the effect found on the spillover region. This is because the way in which we interpret the effect on the noun depends on which possible explanation of the effect on the verb we choose. However, as was already said, further research is needed to fully understand the effect of verb gender marking on reading.

**8.4 Comparison of men and women**

It was hypothesised that the effect of a mismatch between verb gender marking and participant gender would be larger for male participants, since addressing men using feminine marking constitutes a pragmatic violation. However, there is no discernible difference between the effect of gender marking on men and on women. This may suggest that using gender marking that mismatches participant gender is not something that disrupts the reading process, even when the mismatch constitutes a pragmatic violation. Alternatively, if we choose the interpretation that the current results do suggest a processing disadvantage of gender-mismatching verbs, the extent to which the processing is disrupted seems to be the same for both men and women, despite the different pragmatic consequences of the two types of mismatches. This presents a potentially interesting finding that reading is not influenced by the pragmatic appropriateness of certain forms in relation to the addressee. However, first, the effect of gender marking needs to be disambiguated through further research before we can understand the role of its pragmatic appropriateness.

**8.5 Summary**

To summarise, the results are not in line with the original hypotheses. No processing disadvantage of being addressed using a verb with gender marking mismatching one's gender was found. This is the case for women, as well as for men, who cannot be addressed using feminine gender marking in Polish in any context. This null result may suggest that mismatches between a feature of the text and addressee identity, which exists outside of the text, do not disrupt the reading process. It may be also that the second person marking cue towards self-ascription is so strong that it overrides any effect of gender marking. However, the result pattern may alternatively be interpreted as tentative evidence that readers do slow down when verb gender marking mismatches their gender. This interpretation may hold true if we interpret the difference in reading time between the gender-matching verbs and the control verbs as indicative

of second person marking facilitating processing, or of a baseline reading time difference between second-person past tense verbs and gerund verbs. Furthermore, the two-way interaction between block and participant gender may suggest that gender marking also has an effect on the reading time of the control verbs, suggesting a longer-lasting effect of gender marking. However, these alternative interpretations of the results are highly speculative, and it is only up to future research to confirm or disprove them. In the next section, I discuss the limitations of the current study and provide suggestions for future research.

## 8.6 Limitations and future research

As already became apparent in the discussion of the results, the fact that the control items differed from the experimental ones in several aspects introduced a potential confound that made the interpretation of the results more difficult. The experimental verbs were second-person singular verbs in the past tense, while the control verbs were gerund verbs (which do not mark person). It is advised for future research to avoid using control items that differ from the experimental ones in too many aspects. However, finding more suitable controls may be difficult. As gender marking is obligatory on past tense verbs, it is not possible to simply use a version of past tense verbs without gender marking. The only other control option that comes to mind is the use of second-person singular verbs in a tense that does not require gender marking. These are the present tense, and the future tense of perfective verbs. The option of using verbs in the present tense was considered in the current study, preceded by the word *najpierw* 'first' instead of the phrase *gdy już* 'when already'. However, this option was decided against, as it also has its disadvantages. Namely, changing the tense would alter the temporal structure of the stories, which might influence reading time. In addition, Eekhof, Eerland, and Willems (2018) found that there was a significant different in the reading time of past and present verbs in Dutch. On the other hand, gerund verbs allow to preserve the past tense in the second sentence. As it is not easy to find perfect controls, it is advised to at least be aware of the baseline differences in how fast the experimental and control items might be read. For example, it may be advisable to conduct a pilot study to compare the reading times on the controls and on the second-person singular past tense verbs in a language that does not mark gender on past tense verbs. This should ideally be done using a language with a maximally similar way in which the two verb forms are used to Polish.

Another limitation of the stimuli design is that the region preceding the critical verb was not the same in the experimental and control items. Given the high possibility of spillover effects in self-paced reading experiments, this may also cause difficulties in the interpretation of the results. It also makes the choice of control items even more challenging, as the verb form chosen can severely restrict what it can be preceded by. For example, present tense verbs or gerund verbs cannot be preceded by *gdy już* 'when already', though future tense verbs can.

The unclear results are also even more so difficult to interpret given that the reading time method has not been previously used to study any topics similar to the one of this thesis. Future research could first explore this topic using more familiar methods, before moving on to the reading time method. For example, given that the ERP method has been used in similar studies, and that it may be potentially more sensitive to different types of violations, the current topic could be first investigated using this method. Alternatively, future research can also use triangulation to better understand the results of a reading time study. For example, a questionnaire measuring constructs that are may be negatively affected by a gender mismatch, such as mental simulation, engagement, or sense of belonging, could be used together with a reading time method. In addition, further research into the relationship between mental simulation and reading may aid the interpretation of future results.

The present study suggests that gender marking may influence participants' reading time, though given the explorative nature of the study, conducting follow-up research is vital. Given this possibility suggested by the results of this study, combined with the results of Katz and Regev (*n.d.*) who found a negative effect of a gender mismatch on math and reading comprehension tests results, it is important to continue the research on second-person singular masculine generics. The influence of second-person verb gender marking on processing remains particularly intriguing considering that first-person studies, such as the ERP study on Slovak by Hanuliková and Carreiras (2015), and the perspective-taking studies by Andonova et al. (2015), did find that people are sensitive to gender mismatches on first person verbs. Moreover, while it is too early to tell whether second-person masculine generics could have a negative effect on the pursuit of gender equality, grammatical gender should not be dismissed as something trivial, as previous studies found it to influence language speakers' social and psychological reality (e.g. Garnham & Yakovlev, 2015; Horvath & Sczesny, 2016; Vainapel et al. 2015). Second-person

masculine generics are also particularly worth exploring given the special impact that second-person marking has been found to have on the addressee in previous studies.

# References

Andeweg, S., Hendrix, R., van 't Hoff, V., de Hoop, H. (2013). En dan vermoord je hem... Over de invloed van grammaticale persoon op identificatie. [And then you kill him... On the influence of grammatical person on identification]. *Neerlandistiek, volume 2013,* 1-19.

Andonova, E., Savcheva, Z., Todorova, G. (2015). How grammatical gender affects perspective taking. In D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society* (pp. 102-107). Austin, TX: Cognitive Science Society.

APA Publication Manual Task Force (1977). Guidelines for non-sexist language in APA journals: Publication Manual change sheet 2. *American Psychologist, 32,* 487-494.

Auer, P. & Stukenbrock, A. (2018). When 'you' means 'I': The German 2nd Ps.Sg. pronoun *du* between genericity and subjectivity. *Open Linguistics, 4,* 280-309. https://doi.org/10.1515/opli-2018-0015

Bašnáková, J., van Berkum, J., Weber, K., & Hagoort, P. (2015). A job interview in the MRI scanner: How does indirectness affect addressees and overhearers? *Neuropsychologia, 76,* 79-91. https://doi.org/10.1016/j.neuropsychologia.2015.03.030

Bates, D., Maechler, M., Bolker, B. M., & Walker, S. C. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software, 67*(1), 1-48. https://doi.org/10.18637/jss.v067.i01

Bojarska, K. (2011). Wpływ androcentrycznych i inkluzywnych płciowo konstrukcji językowych na skojarzenia z płcią. [Influence of androcentric and gender-inclusive lexical constructions on gender-associational responses]. *Studia Psychologiczne, 49*(2), 53-68. https://doi.org/10.2478/v10167-011-0010-y

Bornkessel-Schlesewsky, I., Krauspenhaar, S., & Schlesewsky, M. (2013). Yes, you can? A speaker's potency to act upon his words orchestrates early neural responses to message-level meaning? *PLoS ONE, 8*(7), e69173. https://doi.org/10.1371/journal.pone.0069173

Brunyé, T. T., Ditman, T., Giles, G. E., Holmes, A., Taylor, H. A. (2016). Mentally simulating narrative perspective is not universal or necessary for language comprehension. *Journal of Experimental Psychology: LMC, 42*(10), 1592-1605. https://doi.org/10.1037/xlm0000250

Brunyé, T. T., Ditman, T., Mahoney, C. R., Augustyn, J. S., Taylor, H. A. (2009). When you and I share perspectives: Pronouns modulate perspective taking during narrative comprehension. *Psychological Science, 20*(1), 27-32. https://doi.org/10.1111/j.1467-9280.2008.02249

Brunyé, T., T., Ditman, T., Mahoney, C. R., Taylor, H. A. (2011). Better you than I: Perspectives and emotion simulation during narrative comprehension. *Journal of Cognitive Psychology, 23*(5), 659-666. https://doi.org/10.1080/20445911.2011.559160

Charney, R. (1980). Speech roles and the development of personal pronouns. *Journal of Child Language, 7,* 509-528.  https://doi.org/10.1017/S0305000900002816

Chiat, S. (1986). Personal pronouns. In P. Fletcher & M. Garman (Eds.), *Language acquisition* (pp. 339-355). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511620683

Child, S., Oakhill, J., & Garnham, A. (2018). You're the emotional one: The role of perspective for emotion processing in reading comprehension. *Language, Cognition and Neuroscience, 33*(7), 878-889. https://doi.org/10.1080/23273798.2018.1431397

Centrum EFEKTY (*n.d.*). *Jaki kierunek studiów wybrać? (poradnik dla kandydatów i test kompetencji).* [Which university programme to choose? (advice for candidates and competency test)]. Retrieved from https://studia.pl/poradnik-kandydata/2679-jaki-kierunek-studiow-wybrac-poradnik

Cruz, R. E., Leonhardt, J. M., & Pezzuti, T. (2017). Second person pronouns enhance consumer involvement and brand attitude. *Journal of Interactive Marketing, 39,* 104-116. https://doi.org/10.1016/j.intmar.2017.05.001

Dank, M., Deutsch, A., & Bock, K. (2015). Resolving conflicts in natural and grammatical gender agreement: Evidence from eye movements. *Journal of Psycholinguistic Research, 44*, 435-467. http://doi.org/10.1007/s10936-014-9291-9

Ditman, T., Brunyé, T., Mahoney, C. R., Taylor, H. A. (2010). Simulating an enactment effect: Pronouns guide action simulation during narrative comprehension. *Cognition, 115,* 172-178. https://doi.org/10.1016/j.cognition.2009.10.014

de Hoop, H. & Tarenskeen, S. (2015). It's all about *you* in Dutch. *Journal of Pragmatics, 88,* 163-175. https://doi.org/10.1016/j.pragma.2014.07.001

Eekhof, L. S., Eerland, A., & Willems, R. M. (2018). Readers' insensitivity to tense revealed: No differences in mental simulation during reading of present and past tense stories. *Collabra: Psychology, 4*(1), 1-12. http://doi.org/10.1525/collabra.121

Engelkamp, J. (1998). *Memory for actions*. Hove: Psychology Press Ltd.

Fields, E. C. & Kuperberg, G. R. (2012). It's all about you: An ERP study of emotion and self-relevance in discourse. *NeuroImage, 62,* 562-574. http://doi.org/10.1016/j.neuroimage.2012.05.003

Garnham, A. & Yakovlev, Y. (2015). The interaction of morphological and stereotypical gender information in Russian. *Frontiers in Psychology, 6,* 1-12. https://doi.org/10.3389/fpsyg.2015.01720

Garrod, S. (2006). Psycholinguistic research methods. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics* (pp. 251-257). Elsevier.

Gastil, J. (1990). Generic pronouns and sexist language: The oxymoronic character of masculine generics. *Sex Roles, 23*(11/12), 629-643. https://doi.org/10.1007/BF00289252

Green, M. C. & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology, 79*(5), 701-721. https://doi.org/10.1037/0022- 3514.79.5.701

Gygax, P. & Gabriel, U. (2008). Can a group of musicians be composed of women? Generic interpretation of French masculine role names in the absence and presence of feminine forms. *Swiss Journal of Psychology, 67*(3), 143-151. https://doi.org/10.1024/1421-0185.67.3.143

Gygax, P., Gabriel, U., Sarrasin, O., Oakhill, J., & Garnham, A. (2008). Generically intended but specifically interpreted: When beauticians, musicians and mechanics are all men. *Language and Cognitive Processes, 23*(3), 464-485. https://doi.org/10.1080/01690960701702035

Hamilton, M. C. (1991). Masculine bias in the attribution of personhood: People = male, male = people. *Psychology of Women Quarterly, 15,* 393-402. https://doi.org/10.1111/j.1471-6402.1991.tb00415

Hanulíková, A. & Carreiras, M. (2015). Electrophysiology of subject-verb agreement mediated by speaker's gender. *Frontiers in Psychology, 6*, 1-12. https://doi.org/10.3389/fpsyg.2015.01396

Havik, E., Roberts, L., van Hout, R., Schreuder, R., & Haverkort, M. (2009). Processing subject–
object ambiguities in the L2: A self-paced reading study with German L2 learners of
Dutch. *Language Learning, 59*, 73–112.  https://doi.org/10.1111/j.1467-9922.2009.00501

Hellinger, M. & Bussmann, H. (2001). *Gender across languages: Volume 1.* Amsterdam: John
Benjamin. https://doi.org/10.1075/impact.9

Hellinger, M. & Bussmann, H. (2002). *Gender across languages: Volume 2.* Amsterdam: John
Benjamin. https://doi.org/10.1075/impact.10

Hellinger, M. & Bussmann, H. (2003). *Gender across languages: Volume 3.* Amsterdam: John
Benjamin. https://doi.org/10.1075/impact.11

Hellinger, M. & Motschenbacher, H. (2015). *Gender across languages: Volume 4.* Amsterdam:
John Benjamin. https://doi.org/10.1075/impact.36

Horvarth, L. K. & Sczesny, S. (2016). Reducing women's lack of fit with leadership positions?
Effects of the wording of job advertisements. *European Journal of Work and
Organizational Psychology, 25*(2), 316-328.
https://doi.org/10.1080/1359432X.2015.1067611

Irmen, L. (2007). What's in a (role) name? Formal and conceptual aspects of comprehending
personal nouns. *Journal of Psycholinguistic Research, 36*(6), 431-456.
https://doi.org/10.1007/s10936-007-9053-z

Irmen, L. & Rossberg, N. (2004). Gender markedness of language: The impact of grammatical
and nonlinguistic information on the mental representation of person information.
*Journal of Language and Social Psychology, 23*(3), 272-307.
https://doi.org/10.1177/0261927X04266810

Irmen, L. & Schumann, E. (2011). Processing grammatical gender of role nouns: Further
evidence from eye movements. *Journal of Cognitive Psychology, 23*(8), 998-1014.
https://doi.org/10.1080/20445911.2011.596824

Jiang, X., Li, Y., & Zhou, X. (2013). Is it over-respectful of disrespectful? Differential patterns
of brain activity in perceiving pragmatic violation of social status information during
utterance comprehension. *Neuropsychologia, 51,* 2210-2223.
https://doi.org/10.1016/j.neuropsychologia.2013.07.021

Jiang, X., Tan, Y., & Zhou, X. (2009). Processing the universal quantifier during sentence

    comprehension: ERP evidence. *Neuropsychologia, 47*, 1799–1815.

    https://doi.org/10.1016/j.neuropsychologia.2009.02.020

Jegerski, J. (2014). Self-paced reading. In J. Jegerski & B. VanPatten (Eds.), *Research methods*

    *in second language psycholinguistics* (pp. 20-49). New York: Routledge.

Just, M. A., & Carpenter, P. A. (1980). A theory of reading: From eye fixations to

    comprehension. *Psychological Review, 87*(4), 329-354. http://doi.org/10.1037/0033-

    295X.87.4.329

Katz, T. K. & Regev, T. (*n.d.*). *Do gendered languages fail women in math?* Manuscript

    submitted for publication. Retrieved from

    http://bschool.huji.ac.il/.upload/Seminars/DO%20GENDERED%20LANGUAGES%20F

    AIL%20WOMEN%20IN%20MATH.pdf

Keating, G. D. (2009). Sensitivity to violations of gender agreement in native and nonnative

    Spanish: An eye-movement investigation. *Language Learning, 59*(3), 503-535.

    http://doi.org/10.1111/j.1467-9922.2009.00516

Kemmerer, D., Gonzalez Castillo, J., Talavage, T., Patterson, S., Wiley, C. (2008).

    Neuroanatomical distribution of five semantic components of verbs: Evidence from

    fMRI. *Brain & Language, 107,* 16-43. https://doi.org/10.1016/j.bandl.2007.09.003

Köder, F. & Maier, E. (2016). When *you* isn't you: The attraction of self-ascription in children's

    interpretation of pronouns in reported speech. *Glossa, 2*(1), 1-17.

    https://doi.org/10.5334/gjgl.187

Kutas, M. & Federmeier, K. D. (2010). Thirty years and counting: Finding meaning in the N400

    component of the event-related brain potential (ERP). *Annual Review of Psychology, 62,*

    621-647. https://doi.org/10.1146/annurev.psych.093008.131123

Lattner, S. & Friederici, A. D. (2003). Talker's voice and gender stereotype in human auditory

    sentence processing - evidence from event-related brain potentials. *Neuroscience Letters,*

    *339*(3), 191-194. https://doi.org /10.1016/S0304-3940(03)00027-2

Levy, R. (2008). Expectation-based syntactic comprehension. *Cognition, 106*(3), 1126-1177.

    https://doi.org/10.1016/j.cognition.2007.05.006

Mak, M. & Willems, R. M. (2019). Mental simulation during literary reading: Individual differences revealed with eye-tracking. *Language, Cognition and Neuroscience, 34(*4), 511-535. https://doi.org/10.1080/23273798.2018.1552007

Mostowska, M. (2018, January 10). *Wieczorna medytacja na sen* [Evening meditation for sleep] [Video file]. Retrieved from https://www.youtube.com/watch?v=0UIAjNhGKbo

Malamud, S. A. (2012). Impersonal indexicals: *one, you, man,* and *du. Journal of Computational German Linguistics, 15,* 1-48. http://doi.org/10.1007/s10828-012-9047-6

Mayer, R. E., Fennell, S., Farmer, L., Campbell, J. (2004). A personalization effect in multimedia learning: Students learn better when words are in conversational style rather than formal style. *Journal of Educational Psychology, 96*(2), 389-395. https://doi.org/10.1037/0022-0663.96.2.389

Miller, C. & Swfit, K. (1980). *The handbook of nonsexist writing.* New York: Harper & Row.

Moulton, J., Robinson, G. M., & Elias, C. (1978). Sex bias in language: "Neutral" pronouns that aren't. *American Psychologist, 33*(11), 1032-1036. http://doi.org/10.1037/0003-066X.33.11.1032

Nilsson, L.-G. (2000). Remembering actions and words. In F. I. M. Craik & E. Tulving (Eds.), *Oxford handbook of memory* (pp. 137–148). Oxford: Oxford University Press.

Parks, J. B., & Roberton, M. A. (2004). Attitudes toward women mediate the gender effect on attitudes toward sexist language. *Psychology of Women Quarterly, 28,* 233-239. http://doi.org/10.1111/j.1471-6402.2004.00140

Perlin, J. & Mielczarek, A. (2014). Kategoria płci w języku polskim [The category of sex in Polish], *Linguistica Copernicana, 11,* 131-141. http://doi.org/10.12775/LinCop.2014.041

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ).* Ann Arbor, MI: National Center for Research to Improve Post-Secondary Teaching, University of Michigan.

Regal, S., Coulson, S., & Gunter, T. (2010). The communicative style of an addresser can affect language comprehension? ERP evidence from the comprehension of irony. *Brain Research, 1311*,121–135. https://doi.org/10.1016/j.brainres.2009.10.077

Roberts, L., & Felser, C. (2011). Plausibility and recovery from garden paths in second language sentence processing. *Applied Psycholinguistics, 32*(2), 299–331.  https://doi.org/10.1017/S0142716410000421

Rüschemeyer, S.-A., Brass, M., and Friederici, A. D. (2007). Comprehending prehending: Neural correlates of processing verbs with motor stems. *Journal of Cognitive Neuroscience, 19*(5), 855-865. http://doi.org/10.1162/jocn.2007.19.5.855

Sagarra, N. & Herschensohn, J. (2011). Proficiency and animacy effect on L2 gender agreement processes during comprehension. *Language Learning, 61*(1), 80-116. https://doi.org/10.1111/j.1467-9922.2010.00588

Sarrasin, O., Gabriel, U., & Gygax, P. (2012). Sexism and attitudes toward gender-neutral language the case of English, French, and German. *Swiss Journal of Psychology, 71*(3), 113-124. https://doi.org/10.1024/1421-0185/a000078

Sato, M. & Bergen, B. K. (2013). The case of the missing pronouns: Does mentally simulated perspective play a functional role in the comprehension of person? *Cognition, 127,* 361-374. https://doi.org/10.1016/j.cognition.2013.02.004

Siewierska, A. (2004). *Person.* Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511812729

Skärlund, S. (2017). Does *you* mean *I*? Generic *du* ('you') as a case of informalization and subjectification in Swedish. *Norsk Lingvistisk Tidsskrift, 35,* 129-146.

Smetackova, I. (2015). Gender stereotypes, performance and identification with math. *Procedia - Social and Behavioral Sciences, 190,* 211-219. https://doi.org/10.1016/j.sbspro.2015.04.937

Spencer, S. J., Logel, C., Davies, P. G. (2016). Stereotype threat. *Annual Review of Psychology, 67*(1), 415-437. https://doi.org/10.1146/annurev-psych-073115-103235

Stahlberg, D., Sczesny, S., & Braun, F. (2001). Name your favourite musician: Effect of masculine generics and of their alternatives in German. *Journal of Language and Social Psychology, 20*(4), 464-469. https://doi.org/10.1177/0261927X01020004004

Stiller, K. D. & Jedlicka, R. (2010). A kind of expertise reversal effect: Personalisation effect can depend on domain-specific prior knowledge. *Australasian Journal of Educational Technology, 26*(1), 133-149. http://doi.org/10.14742/ajet.1107

Swan, O. (2002). *A grammar of contemporary Polish.* Bloomington, IN: Slavica.

Switzer, J. Y. (1990). The impact of generic word choices: An empirical investigation of age- and sex-related differences. *Sex Roles, 22*(1/2), 69-82. https://doi.org/10.1007/BF00288155

Tager-Flusberg, H. (1994). Dissociations in form and function in the acquisition of language by autistic children. In H. Tager-Flusberg (Ed.), *Constraints on language acquisition: Studies of atypical children* (pp. 175-194). Hillsdale, NJ: Lawrence Erlbaum.

TransGrysy (2018, March 28). *Jak rozmawiać z osobami trans?* [How to talk to trans people?] [Video file]. Retrieved from https://www.youtube.com/watch?v=ik-7Rw-rtVI

Vainapel, S., Shamir, O. Y., Tenenbaum, Y., & Gilam, G. (2015). The dark side of gendered language: The masculine-generic form as a cause for self-report bias. *Psychological Assessment, 27*(4), 1513-1519. http://doi.org/10.1037/pas0000156

van Berkum, J. J. A., van den Brink, D., Tesink, C. M. J. Y., Kos, M., & Hagoort, P. (2008). The neutral integration of speaker and message. *Journal of Cognitive Neuroscience, 20*(4), 580-591. https://doi.org/10.1162/jocn.2008.20054

Vervecken, D. & Hannover, B. (2012). Ambassadors of gender equality? How use of pair forms versus masculines as generics impacts perception of the speaker. *European Journal of Social Psychology, 42*(6), 754-762. https://doi.org/10.1002/ejsp.1893

Vervecken, D., Hannover, B., & Wolter, I. (2013). Changing (s)expectations: How gender fair job descriptions impact children's perceptions and interest regarding traditionally male occupations. *Journal of Vocational Behaviour, 82*(3), 208-220. https://doi.org/10.1016/j.jvb.2013.01.008

Wechsler, S. (2010). What 'you' and 'I' mean to each other: Person indexicals, self-ascription, and theory of mind. *Language, 86*(2), 332-365.

Zimmer, H. D., Cohen, R. L., Guynn, M. J., Engelkamp, J., Kormi-Nouri, R., & Foley, M. A. (2001). *Memory for action.* New York: Oxford University Press.

# Appendix A

<u>Notes about glosses:</u>

- Case, gender, and number are glossed only when I deemed it relevant, or when meaning might be unclear without them.
- MPERS stands for 'masculine-personal' and NMPERS for 'non-masculine-personal'. These are the two grammatical genders that exist in Polish in plural.

<u>All experimental stimuli (version with masculine gender marking):</u>

1)

Wyobraź sobie, że bierzesz udział w lekcji snowboardu. Gdy już przywiązałeś buty do deski, zamierzasz dołączyć do reszty grupy. Jednak w tym momencie podjeżdża do ciebie para narciarzy, którzy potrzebują pomocy w znalezieniu swojego hotelu.

'Imagine that you are taking part in a snowboarding lesson. Once you tied your shoes to the board, you want to join the rest of the group. But then, a pair of skiers who need help in finding their hotel come up to you.'

| Wyobraź | sobie, | że | bierzesz | udział | w | lekcji |
|---------|--------|-----|----------|--------|-----|--------|
| Imagine-2SG.IMP | REFL | that | take-2SG | part | in | lesson |
| snowboardu. | Gdy | już | przywiązałeś | buty | do | deski, |
| snowboard-GEN | When | already | tied-2SG.M | shoes | to | board, |
| zamierzasz | dołączyć | do | reszty | grupy. | Jednak | w |
| want-2SG | join | to | rest | group. | However | in |
| tym | momencie | podjeżdża | do | ciebie | para | narciarzy, |
| this | moment | come.towards-3SG | to | you | pair | skiers-MPERS |
| którzy | potrzebują | pomocy | w | znalezieniu | swojego | hotelu. |
| who | need | help | in | finding | POSS | hotel. |

2)

Wyobraź sobie, że wyjeżdżasz na wakacje w góry. Gdy już spakowałeś rzeczy do walizki, zamierzasz sprawdzić, o której godzinie odjeżdża pociąg. Jednak w tym momencie pojawiają się twoi rodzice z niespodziewaną wizytą.

'Imagine that you are going on holiday in the mountains. Once you packed things in the suitcase, you want to check what time the train leaves. But then, your parents show up with a surprise visit.'

| Wyobraź | sobie, | że | wyjeżdżasz | na | wakacje | w |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | leave-2SG | on | holiday | in |
| góry. | Gdy | już | spakowałeś | rzeczy | do | walizki, |
| mountains. | When | already | packed-2SG.M | things | to | suitcase, |
| zamierzasz | sprawdzić, | o | której | godzinie | odjeżdża | pociąg. |
| want-2SG | check-INF | at | which | hour | leaves | train. |
| Jednak | w | tym | momencie | pojawiają | się | twoi |
| However | in | this | moment | appear-3PL | REFL | your |
| rodzice | z | niespodziewaną | wizytą. | | | |
| parent | with | unexpected | visit. | | | |

3)

Wyobraź sobie, że planujesz wyjście do kina wieczorem. Gdy już kupiłeś bilety przez internet, zamierzasz powiadomić o tym swoich przyjaciół. Jednak w tym momencie dostajesz wiadomość, że wszyscy zmienili zdanie i chcą obejrzeć inny film.

'Imagine that you are planning to go to the cinema in the evening. Once you bought the tickets online, you want to let your friends know. But then you see a message that everyone has changed their minds and wants to see a different movie.

| Wyobraź | sobie, | że | planujesz | wyjście | do | kina |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | plan-2SG | outing | to | cinema |
| wieczorem. | Gdy | już | kupiłeś | bilety | przez | internet, |
| evening-INSTR | When | already | bought-2SG.M | tickets | through | internet, |
| zamierzasz | powiadomić | o | tym | swoich | przyjaciół. | Jednak |

| want-2SG | let.know | about | this | your | friends-MPERS | However |
|----------|----------|-------|------|------|---------------|---------|
| *w* | *tym* | *momencie* | *dostajesz* | *wiadomość,* | *że* | *wszyscy* |
| in | this | moment | see-2SG | message | that | everyone |
| *zmienili* | *zdanie* | *i* | *chcą* | *obejrzeć* | *inny* | *film* |
| changed-3PL.MPERS | opinion | and | want-3PL | watch | different | film |

4)

Wyobraź sobie, że zdajesz egzamin na prawo jazdy. Gdy już zmieniłeś bieg na dwójkę, zamierzasz skręcić w boczną ulicę. Jednak w tym momencie słyszysz koło siebie chrapanie i orientujesz się, że egzaminator śpi.

'Imagine that you are taking a driving exam. Once you changed the gear to the second one, you want to turn into a side road. But then you hear snoring next to you and you realise that the examinator is sleeping.'

| *Wyobraź* | *sobie,* | *że* | *zdajesz* | *egzamin* | *na* | *prawo* |
|-----------|----------|------|-----------|-----------|------|---------|
| Imagine-2SG.IMP | REFL | that | pass-2SG | exam | for | license |
| *jazdy.* | *Gdy* | *już* | *zmieniłeś* | *bieg* | *na* | *dwójkę,* |
| driving-GEN | When | already | changed-2SG.M | gear | on | two |
| *zamierzasz* | *skręcić* | *w* | *boczną* | *ulicę.* | *Jednak* | *w* |
| want-2SG | turn | in | side | road. | However | in |
| *tym* | *momencie* | *słyszysz* | *koło* | *siebie* | *chrapanie* | *i* |
| this | moment | hear-2SG | next.to | self | snoring | and |
| *orientujesz* | *się,* | *że* | *egzaminator* | *śpi.* | | |
| realise | REFL | that | examinator-M | sleeps | | |

5)

Wyobraź sobie, że wyprowadzasz się do Norwegii na pół roku. Gdy już sprawdziłeś dojazd na lotnisko, zamierzasz pożegnać się z rodziną. Jednak w tym momencie babcia zaczyna pakować ci zapasy jedzenia do walizki.

'Imagine that you are moving to Norway for half a year. Once you checked the transport to the airport, you want to say goodbye to your family. But then you see that your grandma is starting to pack food supplies into your suitcase.'

| Wyobraź | sobie, | że | wyprowadzasz | się | do | Norwegii |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | move.out | REFL | to | Norway |
| na | pół | roku. | Gdy | już | sprawdziłeś | dojazd |
| for | half | year. | When | already | checked-2SG.M | transport |
| na | lotnisko, | zamierzasz | pożegnać | się | z | rodziną. |
| to | airport, | want-2SG | say.goodbye | REFL | with | family. |
| Jednak | w | tym | momencie | babcia | zaczyna | pakować |
| However | in | this | moment | grandma | begins | pack-INF |
| ci | zapasy | jedzenia | do | walizki. | | |
| you | supplies | food-GEN | to | suitcase. | | |

6)

Wyobraź sobie, że biegniesz w półmaratonie po raz pierwszy w życiu. Gdy już przekroczyłeś metę po godzinach biegu, zamierzasz odebrać swój medal. Jednak w tym momencie podchodzi do ciebie dziennikarz z mikrofonem i zaczyna zadawać pytania.

'Imagine that you are running a half-marathon for the first time in your life. Once you crossed the finish line after hours of running, you want to collect your medal. But then a journalist comes up to you with a microphone and starts asking you questions.'

| Wyobraź | sobie, | że | biegniesz | w | półmaratonie | po |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | run-2SG | in | half-marathon | for |
| raz | pierwszy | w | życiu. | Gdy | już | przekroczyłeś |
| time | first | in | life | When | already | crossed-2SG.M |
| metę | po | godzinach | biegu, | zamierzasz | odebrać | swój. |
| finish.line | after | hours | running-GEN | want-2SG | collect | POSS |
| medal. | Jednak | w | tym | momencie | podchodzi | do |
| medal | However | in | this | moment | comes.up | to |
| ciebie | dziennikarz | z | mikrofonem | i | zaczyna | zadawać |
| you | journalist | with | microphone | and | begins | ask |
| pytania. | | | | | | |
| questions | | | | | | |

7)

Wyobraź sobie, że adoptujesz szczeniaka ze schroniska. Gdy już urządziłeś miejsce dla pieska w samochodzie, zamierzasz iść pożegnać się z pracownikami schroniska. Jednak w tym momencie pies wymyka się na przednie siedzenie i siusia prosto na twoją kurtkę.

'Imagine that you are adopting a puppy from a shelter. Once you arranged a place for the dog in the car, you want to go say goodbye to the shelter employees. But then the dog sneaks out to the front seat and pees right on your jacket.'

| *Wyobraź* | *sobie,* | *że* | *adoptujesz* | *szczeniaka* | *ze* | *schroniska.* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | adopt-2SG | puppy | from | shelter. |
| *Gdy* | *już* | *urządziłeś* | *miejsce* | *dla* | *pieska* | *w* |
| When | already | set.up-2SG.M | place | for | dog-DIM | in |
| *samochodzie,* | *zamierzasz* | *iść* | *pożegnać* | *się* | *z* | *pracownikami* |
| car, | want | go | say.goodbye | REFL | with | employers-MPERS |
| *schroniska* | *Jednak* | *w* | *tym* | *momencie* | *pies* | *wymyka* |
| shelter-GEN | However | in | this | moment | dog | sneaks.out |
| *się* | *na* | *przednie* | *siedzenia* | *i* | *siusia* | *prosto* |
| REFL | onto | front | seat | and | pees | straight |
| *na* | *twoją* | *kurtkę* | | | | |
| on | your | jacket | | | | |

8)

Wyobraź sobie, że spędzasz niedzielę w parku krajobrazowym. Gdy już skręciłeś ścieżką w las, zamierzasz wyjąć aparat fotograficzny i zrobić kilka zdjęć. Jednak w tym momencie na twojej drodze staje lisica z pięcioma małymi lisami.

'Imagine that you are spending a Sunday in a landscape park. Once you turned on a path leading into the forest, you want to take out your camera and take some pictures. But then a vixen with five little foxes appear on your path.'

| *Wyobraź* | *sobie,* | *że* | *spędzasz* | *niedzielę* | *w* | *parku* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | spend-2SG | Sunday | in | park |
| *krajobrazowym.* | *Gdy* | *już* | *skręciłeś* | *ścieżką* | *w* | *las,* |

| | | | | | | |
|---|---|---|---|---|---|---|
| landscape-ADJ | When | already | turned-2SG.M | path-INSTR | into | forest |
| *zamierzasz* | *wyjąć* | *aparat* | *fotograficzny* | *i* | *zrobić* | *kilka* |
| want-2SG | take.out | device | photography-ADJ | and | take-INF | several |
| *zdjęć.* | *Jednak* | *w* | *tym* | *momencie* | *na* | *twojej* |
| photos. | However | in | this | moment | on | your |
| *drodze* | *staje* | *lisica* | *z* | *pięcioma* | *małymi* | *lisami.* |
| way | stands | vixen | with | five | little | foxes. |

9)

Wyobraź sobie, że urządzasz imprezę sylwestrową w domu. Gdy już schowałeś szampana do lodówki, zamierzasz pojechać do sklepu po przekąski. Jednak w tym momencie widzisz, że pod twoimi drzwiami jest prawie pół metra śniegu.

'Imagine that you are organising a New Year's Eve party at home. Once you hid the champagne in the fridge, you want to go to a shop to buy snacks. But then you see that in front of your door there is almost half a meter of snow.'

| *Wyobraź* | *sobie,* | *że* | *urządzasz* | *imprezę* | *sylwestrową* | *w* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | organise-2SG | party | New Year's Eve-ADJ | at |
| *domu.* | *Gdy* | *już* | *schowałeś* | *szampana* | *do* | *lodówki,* |
| home. | When | already | hid-2SG.M | champagne | to | fridge, |
| *zamierzasz* | *pojechać* | *do* | *sklepu* | *po* | *przekąski.* | *Jednak* |
| want-2SG | go-INF | to | shop | for | snacks. | However |
| *w* | *tym* | *momencie* | *widzisz,* | *że* | *pod* | *twoimi* |
| in | this | moment | see-2SG | that | under | your |
| *drzwiami* | *jest* | *prawie* | *pół* | *metra* | *śniegu.* | |
| door | is | almost | half | meter | snow. | |

10)

Wyobraź sobie, że jesteś na kursie językowym we Włoszech. Gdy już zwiedziłeś miasto po zajęciach, zamierzasz poćwiczyć język z tubylcami w barze. Jednak w tym momencie uświadamiasz sobie, że większość osób wokół ciebie to brytyjscy turyści.

'Imagine that you are at a language course in Italy. Once you went around the city after classes, you want to practice the language with the locals at a bar. But then you realise that most of the people around you are British tourists.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *na* | *kursie* | *językowym* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | on | course | language-ADJ |
| *we* | *Włoszech.* | *Gdy* | *już* | *zwiedziłeś* | *miasto* | *po* |
| in | Italy. | When | already | visited-2SG.M | city | after |
| *zajęciach,* | *zamierzasz* | *poćwiczyć* | *język* | *z* | *tubylcami* | *w* |
| classes | want-2SG | practice | language | with | locals | in |
| *barze.* | *Jednak* | *w* | *tym* | *momencie* | *uświadamiasz* | *sobie,* |
| bar. | However | in | this | moment | realise-2SG | REFL |
| *że* | *większość* | *osób* | *wokół* | *ciebie* | *to* | *brytyjscy* |
| that | most | people | around | you | COP | British |
| *turyści.* | | | | | | |
| tourists-MPERS | | | | | | |

11)

Wyobraź sobie, że występujesz w sztuce teatralnej dla dzieci. Gdy już ubrałeś kostium w garderobie, zamierzasz szybko pójść do łazienki. Jednak w tym momencie uświadamiasz sobie, że w twoich spodniach jest wielka dziura.

'Imagine that you are performing in a theatre play for children. Once you put on a costume in the dressing room, you want to quickly go to the bathroom. But then you realise that there is a huge hole in your pants.'

| *Wyobraź* | *sobie,* | *że* | *występujesz* | *w* | *sztuce* | *teatralnej* |
|---|---|---|---|---|---|---|
| Imagine-2G.IMP | REFL | that | perform-2SG | in | play | theatre-ADJ |
| *dla* | *dzieci.* | *Gdy* | *już* | *ubrałeś* | *kostium* | *w* |

| for | kids. | When | already | put.on-2SG.M | costume | in |
|---|---|---|---|---|---|---|
| *garderobie,* | *zamierzasz* | *szybko* | *pójść* | *do* | *łazienki.* | *Jednak* |
| dressing.room | want | quickly | go-INF | to | bathroom. | However |
| *w* | *tym* | *momencie* | *uświadamiasz* | *sobie,* | *że* | *w* |
| in | this | moment | realise-2SG | REFL | that | in |
| *twoich* | *spodniach* | *jest* | *wielka* | *dziura.* | | |
| your | pants | is | huge | hole. | | |

12)

Wyobraź sobie, że spędzasz popołudnie w muzeum sztuki. Gdy już obejrzałeś kolekcję z dziełami dwudziestego wieku, zamierzasz przejść do specjalnej wystawy fotograficznej. Jednak w tym momencie słyszysz huk i widzisz, że jeden z obrazów zaczyna spadać.

'Imagine that you are spending an afternoon in an art museum. Once you watched the collection with pieces from the 20th century, you want to go to the special photography exhibition. But in that moment you hear a noise and you see that one of the paintings is starting to fall.'

| *Wyobraź* | *sobie,* | *że* | *spędzasz* | *popołudnie* | *w* | *muzeum* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | spend-2SG | afternoon | in | museum |
| *sztuki.* | *Gdy* | *już* | *obejrzałeś* | *kolekcję* | *z* | *dziełami* |
| art-GEN | When | already | watched-2SG.M | collection | with | pieces |
| *dwudziestego* | *wieku,* | *zamierzasz* | *przejść* | *do* | *specjalnej* | *wystawy* |
| twentieth-GEN | century-GEN | want-2SG | go.over-2SG | to | special | exhibition |
| *fotograficznej.* | *Jednak* | *w* | *tym* | *momencie* | *słyszysz* | *huk* |
| photography-ADJ | However | in | this | moment | hear-2SG | noise |
| *i* | *widzisz,* | *że* | *jeden* | *z* | *obrazów* | *zaczyna* |
| and | see-2SG | that | one | of | paintings | starts |
| *spadać.* | | | | | | |
| fall-INF | | | | | | |

13)

Wyobraź sobie, że siedzisz w kawiarni niedaleko domu. Gdy już zjadłeś ciasto ze śliwkami, zamierzasz zamówić jeszcze jedną kawę. Jednak w tym momencie uświadamiasz sobie, że byłaby to już twoja piąta kawa tego dnia.

'Imagine that you are sitting in a cafe near home. Once you ate the plum cake, you want to order one more coffee. But then you realise that this would be your fifth coffee of the day.'

| Wyobraź | sobie, | że | siedzisz | w | kawiarni | niedaleko |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | sit-2SG | in | cafe | near |
| domu. | Gdy | już | zjadłeś | ciasto | ze | śliwkami, |
| home | When | already | ate-2SG.M | cake | with | plums |
| zamierzasz | zamówić | jeszcze | jedną | kawę. | Jednak | w |
| want-2SG | order-INF | still | one | coffee | However | in |
| tym | momencie | uświadamiasz | sobie, | że | byłaby | to |
| this | moment | realise-2SG | REFL | that | would | COP |
| już | twoja | piąta | kawa | tego | dnia |  |
| already | your | fifth | coffee | this | day |  |

14)

Wyobraź sobie, że szukasz nowych książek w księgarni. Gdy już przejrzałeś dział z literaturą obcą, zamierzasz wejść na drugie piętro. Jednak w tym momencie dostrzegasz najnowszą książkę twojego ulubionego autora.

'Imagine that you are looking for new books in a bookshop. Once you looked through the section with foreign literature, you want to go up to the second floor. But then you notice the newest book by your favourite author.'

| Wyobraź | sobie, | że | szukasz | nowych | książek | w |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | search-2SG | new | books | in |
| księgarni. | Gdy | już. | przejrzałeś | dział | z | literaturą |
| bookshop | When | already | looked.through-2SG.M | section | with | literature |
| obcą, | zamierzasz | wejść | na | drugie | piętro. | Jednak |
| foreign | want-2SG | go.up | to | second | floor | However |
| w | tym | momencie | dostrzegasz | najnowszą | książkę | twojego |
| in | this | moment | notice-2SG | newst | book | your-GEN |
| ulubionego | autora. |  |  |  |  |  |
| favourite-GEN | author-GEN |  |  |  |  |  |

15)

Wyobraź sobie, że spędzasz dzień na bałtyckiej plaży. Gdy już nałożyłeś krem do opalania, zamierzasz przejść się wzdłuż brzegu. Jednak w tym momencie podlatuje mewa i próbuje ukraść drożdżówkę z twojego plecaka.

'Imagine that you are spending a day at a Baltic beach. Once you put on sunscreen, you want to go for a walk along the shore. But then a seagull flies up and tries to steal a pastry from your backpack.'

| Wyobraź | sobie, | że | spędzasz | dzień | na | bałtyckiej |
|---------|--------|-----|----------|-------|-----|------------|
| Imagine-2SG.IMP | REFL | that | spend-2SG | day | on | Baltic-ADJ |
| plaży. | Gdy | już | nałożyłeś | krem | do | opalania |
| beach | When | already | put.on-2SG.M | cream | for | sunbathing |
| zamierzasz | przejść | się | wzdłuż | brzegu. | Jednak | w |
| want | walk | REFL | along | shore | However | in |
| tym | momencie | podlatuje | mewa | i | próbuje | ukraść |
| this | moment | flies.up | seagull | and | tries | steal-INF |
| drożdżówkę | z | twojego | plecaka. | | | |
| pastry | from | your | backpack. | | | |

16)

Wyobraź sobie, że zwiedzasz wielkie oceanarium. Gdy już zobaczyłeś zwierzęta z Afryki Wschodniej, zamierzasz skierować się do wyjścia. Jednak w tym momencie przebudza się mały hipopotam i zaczyna się bawić w wodzie, więc zostajesz na niego popatrzeć.


'Imagine that you are visiting a big oceanarium. Once you saw the animals from East Africa, you want to head towards the exit. But then a little hippo wakes up and starts playing in the water, so you stay to watch it.'

| Wyobraź | sobie, | że | zwiedzasz | wielkie | oceanarium. | Gdy |
|---------|--------|-----|-----------|---------|-------------|-----|
| Imagine-2SG.IMP | REFL | that | visit-2SG | big | oceanarium | When |
| już | zobaczyłeś | zwierzęta | z | Afryki | Wschodniej | zamierzasz |
| already | saw-2SG.M | animals | from | Africa | East-ADJ | want |
| skierować | się | do | wyjścia. | Jednak | w | tym |
| turn | REFL | to | exit. | However | in | this |
| momencie | przebudza | się | mały | hipopotam | i | zaczyna |

| moment | wakes | REFL | little | hippo | and | starts |
|---|---|---|---|---|---|---|
| *się* | *bawić* | *w* | *wodzie,* | *więc* | *zostajesz* | *na* |
| REFL | play-INF | in | water | so | stay-2SG | at |
| *niego* | *popatrzeć.* | | | | | |
| him | look-INF | | | | | |

17)

Wyobraź sobie, że jesteś w samolocie lecącym do Stanów Zjednoczonych. Gdy już włożyłeś torbę pod siedzenie, zamierzasz włączyć tryb samolotowy w komórce. Jednak w tym momencie słyszysz ogłoszenie, że jest problem z silnikiem i nie wiadomo, kiedy samolot będzie mógł wystartować.

'Imagine that you are on a plane to the United States. Once you put your suitcase under the seat, you want to turn on airplane mode on your phone. But then you hear an announcement that there is a problem with the engine and it is not known when the plane will be able to take off.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *w* | *samolocie* | *lecącym* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | in | plane | flying |
| *do* | *Stanów* | *Zjednoczonych.* | *Gdy* | *już* | *włożyłeś* | *torbę* |
| to | States | United | When | already | put-2SG.M | bag |
| *pod* | *siedzenie,* | *zamierzasz* | *włączyć* | *tryb* | *samolotowy* | *w* |
| under | seat | want-2SG | turn.on | mode | plane-ADJ | in |
| *komórce.* | *Jednak* | *w* | *tym* | *momencie* | *słyszysz* | *ogłoszenie,* |
| mobile.phone | However | in | this | moment | hear-2SG | announcement |
| *że* | *jest* | *problem* | *z* | *silnikiem* | *i* | *nie* |
| that | there.is | problem | with | engine | and | not |
| *wiadomo,* | *kiedy* | *samolot* | *będzie* | *mógł* | *wystartować.* | |
| know-IMPERS | when | plane | will | can | start | |

18)

Wyobraź sobie, że jesteś w restauracji greckiej z całą rodziną. Gdy już zamówiłeś zupę z soczewicy, zamierzasz przejrzeć kartę win. Jednak w tym momencie podchodzi kelner i daje wam butelkę wina na koszt restauracji.

'Imagine that you are at a Greek restaurant with the whole family. After you ordered a lentil soup, you want to look through the wine card. But then the waiter comes by and gives you a bottle of wine on the house.'

| Wyobraź | sobie, | że | jesteś | w | restauracji | greckiej |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | in | restaurant | Greek |
| z | całą | rodziną. | Gdy | już | zamówiłeś | zupę |
| with | whole | family. | When | already | ordered-2SG.M | soup |
| z | soczewicy | zamierzasz | przejrzeć | kartę | win. | Jednak |
| from | lentils | want | look.through | card | wine.GEN | However |
| w | tym | momencie | podchodzi | kelner | i | daje |
| in | this | moment | comes.up | waiter | and | gives |
| wam | butelkę | wina | na | koszt | restauracji. | |
| you-PL | bottle | wine-GEN | on | cost | restaurant-GEN | |

19)

Wyobraź sobie, że pracujesz w popularnym barze w sobotni wieczór. Gdy już zaniosłeś drinki dla pary siedzącej na zewnątrz, zamierzasz obsłużyć klientów czekających przy barze. Jednak w tym momencie dwie osoby z kolejki zaczynają się bić.

'Imagine that you are working at a popular bar on a Saturday evening. Once you brought drinks for a couple sitting outside, you want to serve clients waiting at the bar. But then two people in the line begin to fight.'

| Wyobraź | sobie, | że | pracujesz | w | popularnym | barze |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | work-2SG | in | popular | bar |
| w | sobotni | wieczór | Gdy | już | zaniosłeś | drinki |
| on | Saturday | evening. | When | already | brought-2SG.M | cocktails |
| dla | pary | siedzącej | na | zewnątrz | zamierzasz | obsłużyć |
| for | couple | sitting | on | outside | want | serve |
| klientów | czekających | przy | barze | Jednak | w | tym |
| clients | waiting | at | bar | However | in | this |
| momencie | dwie | osoby | z | kolejki | zaczynają | się |
| moment | two | persons | from | line | start | REFL |
| bić. | | | | | | |
| fight | | | | | | |

20)

Wyobraź sobie, że jedziesz autobusem do centrum miasta. Gdy już skasowałeś bilet przy wejściu, zamierzasz znaleźć miejsce do siedzenia. Jednak w tym momencie autobus gwałtownie hamuje i spadasz prosto na kolana starszej pani.

'Imagine that you are taking the bus to the city centre. Once you punched your ticket at the entrance, you want to find a place to sit. But then the bus breaks suddenly and you fall straight on an old lady's lap.'

| *Wyobraź* | *sobie,* | *że* | *jedziesz* | *autobusem* | *do* | *centrum* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | ride-2SG | bus | to | centre |
| *miasta.* | *Gdy* | *już* | *skasowałeś* | *bilet* | *przy* | *wejściu* |
| city-GEN | When | already | punched-2SG.M | ticket | at | entrance |
| *zamierzasz* | *znaleźć* | *miejsce* | *do* | *siedzenia.* | *Jednak* | *w* |
| want-2SG | find | place | for | sitting | However | in |
| *tym* | *momencie* | *autobus* | *gwałtownie* | *hamuje* | *i* | *spadasz* |
| this | moment | bus | violently | breaks | and | fall-2SG |
| prosto | *na* | *kolana* | *starszej* | *pani.* | | |
| straight | on | lap | older-GEN | lady-GEN | | |

21)

Wyobraź sobie, że zaczynasz staż w międzynarodowej firmie. Gdy już podpisałeś umowę z pracodawcą, zamierzasz iść poznać członków twojego zespołu. Jednak w tym momencie uruchamia się alarm pożarowy i wszyscy kierują się do wyjścia.

'Imagine that you are starting an internship at an international company. Once you signed the contract with your employer, you want to go meet the members of your team. But then a fire alarm starts and everyone heads towards the exit.'

| *Wyobraź* | *sobie,* | *że* | *zaczynasz* | *staż* | *w* | *międzynarodowej* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | start-2SG | internship | at | international |
| *firmie.* | *Gdy* | *już* | *podpisałeś* | *umowę* | *z* | *pracodawcą* |
| company | When | already | signed-2SG.M | contract | with | employer-M |
| *zamierzasz* | *iść* | *poznać* | *członków* | *twojego* | *zespołu* | *Jednak* |
| want-2SG | go | meet | members-MPERS | your-GEN | team-GEN | However |
| *w* | *tym* | *momencie* | *uruchamia* | *się* | *alarm* | *pożarowy* |
| in | this | moment | starts | REFL | alarm | fire-ADJ |

| i | wszyscy | kierują | się | do | wyjścia. |
|---|---------|---------|-----|-----|---------|
| and | everyone | turns | REFL | to | exit |

22)

Wyobraź sobie, że jesteś na swojej pierwszej lekcji gotowania. Gdy już upiekłeś mięso w piekarniku, zamierzasz przyrządzić sos. Jednak w tym momencie słyszysz krzyk i widzisz, że osoba koło ciebie zraniła się nożem.

'Imagine that you are in your first cooking class. Once you baked the meat in the oven, you want to prepare the sauce. But then you hear a scream and see that the person next to you has hurt themselves with a knife.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *na* | *swojej* | *pierwszej* |
|-----------|----------|------|----------|------|----------|-------------|
| Imagine-2SG.IMP | REFL | that | are | at | your | first |
| *lekcji* | *gotowania.* | *Gdy* | *już* | *upiekłeś* | *mięso* | *w* |
| lesson | cooking-GEN | When | already | baked-2SG.M | meat | in |
| *piekarniku* | *zamierzasz* | *przyrządzić* | *sos.* | *Jednak* | *w* | *tym* |
| oven | want-2SG | prepare | sauce | However | in | this |
| *momencie* | *słyszysz* | *krzyk* | *i* | *widzisz,* | *że* | *osoba* |
| moment | hear-2SG | scream | and | see-2SG | that | person |
| koło | *ciebie* | *zraniła* | *się* | *nożem.* | | |
| next.to | you | hurt-3SG | REFL | knife-INSTR | | |

23)

Wyobraź sobie, że wspinasz się na szczyt górski na wakacjach w Chorwacji. Gdy już wyciągnąłeś mapę z plecaka, zamierzasz udać się w stronę szlaku. Jednak w tym momencie uświadamiasz sobie, że nie masz ze sobą nic do picia.

'Imagine that you are climbing a mountain on holiday in Croatia. Once you took out the map from your backpack, you want to head towards the trail. But then you realise that you don't have anything to drink with you.'

| *Wyobraź* | *sobie,* | *że* | *wspinasz* | *się* | *na* | *szczyt* |
|-----------|----------|------|------------|-------|------|----------|
| Imagine-2SG.IMP | REFL | that | climb-2SG | REFL | on | top |

| górski | na | wakacjach | w | Chorwacji | Gdy | już |
|---|---|---|---|---|---|---|
| mountain-ADJ | on | holiday | in | Croatia | When | already |

| wyciągnąłeś | mapę | z | plecaka | zamierzasz | udać | się |
|---|---|---|---|---|---|---|
| took.out-2SG.M | map | from | backpack | want-2SG | head-INF | REFL |

| w | stronę | szlaku | Jednak | w | tym | momencie |
|---|---|---|---|---|---|---|
| in | direction | path-GEN | However | in | this | moment |

| uświadamiasz | sobie, | że | nie | masz | ze | sobą |
|---|---|---|---|---|---|---|
| realise | REFL | that | not | have | with | self |

| nic | do | picia |
|---|---|---|
| nothing | for | drinking |

24)

Wyobraź sobie, że jesteś na jarmarku bożonarodzeniowym. Gdy już wypiłeś grzańca do dna, zamierzasz pooglądać ozdoby na choinkę. Jednak w tym momencie widzisz parę przyjaciół, więc idziesz przywitać się z nimi.

'Imagine that you are at a Christmas market. Once you drank all of the mulled wine you want to look at the Christmas tree decorations. But then you see a pair of your friends, so you go to say hi to them.'

| Wyobraź | sobie, | że | jesteś | na | jarmarku | bożonarodzeniowym |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | at | market | Christmas-ADJ |

| Gdy | już | wypiłeś | grzańca | do | dna | zamierzasz |
|---|---|---|---|---|---|---|
| When | already | drank-2SG.M | mulled.wine | to | bottom | want |

| pooglądać | ozdoby | na | choinkę | Jednak | w | tym |
|---|---|---|---|---|---|---|
| watch | ornaments | for | Christmas.tree | However | in | this |

| momencie | widzisz | parę | przyjaciół | więc | idziesz | przywitać |
|---|---|---|---|---|---|---|
| moment | see | couple | friends | so | go-2SG | say.hi |

| się | z | nimi |
|---|---|---|
| REFL | with | them |

25)

Wyobraź sobie, że jesteś na łyżwach ze znajomymi. Gdy już okrążyłeś lodowisko bez trudu, zamierzasz spróbować kilku sztuczek. Jednak w tym momencie wszyscy są proszeni o opuszczenie lodowiska, bo ma się na nim rozpocząć mecz hokeja.

'Imagine that you are ice skating with your friends. Once you circled the ice rink without trouble, you want to try out some tricks. But then everyone is asked to leave the ice rink, because a hockey match is about to start on it.'

| Wyobraź | sobie, | że | jesteś | na | łyżwach | ze |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | at | ice.skates | with |
| *znajomymi* | *Gdy* | *już* | *okrążyłeś* | *lodowisko* | *bez* | *trudu* |
| friends | When | already | circled-2SG.M | ice.rink | without | difficulty |
| *zamierzasz* | *spróbować* | *kilku* | *sztuczek* | *Jednak* | *w* | *tym* |
| want-2SG | try | several | tricks | However | in | this |
| *momencie* | *wszyscy* | *są* | *proszeni* | *o* | *opuszczenie* | *lodowiska* |
| moment | everyone | are | asked | to | leave | ice.rink |
| *bo* | *ma* | *się* | *na* | *nim* | *rozpocząć* | *mecz* |
| because | is.supposed.to | REFL | on | it | start | match |
| *hokeja* | | | | | | |
| hockey-GEN | | | | | | |

26)

Wyobraź sobie, że jesteś na spływie kajakowym po Odrze. Gdy już odebrałeś wiosła z wypożyczalni, zamierzasz udać się w stronę rzeki. Jednak w tym momencie zaczyna padać grad, więc czekasz w środku aż przestanie.

'Imagine that you are on a kayaking trip down the Odre. Once you picked up the paddles from the rental place, you want to head towards the river. But then it starts hailing so you wait inside until it stops.'

| Wyobraź | sobie, | że | jesteś | na | spływie | kajakowym |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | at | ~flow-N | kayak-ADJ |
| *po* | *Odrze.* | *Gdy* | *już* | *odebrałeś* | *wiosła* | *z* |
| on | Odre | When | already | picked.up-2SG.M | paddles | from |
| *wypożyczalni* | *zamierzasz* | *skierować* | *się* | *w* | *stronę* | *rzeki* |
| rental.place | want-2SG | head | REFL | in | direction | river |
| *Jednak* | *w* | *tym* | *momencie* | *zaczyna* | *padać* | *grad* |
| However | in | this | moment | starts | fall-INF | hail |
| *więc* | *czekasz* | *w* | *środku* | *aż* | *przestanie* | |
| so | wait-2SG | in | side | until | stops | |

27)

Wyobraź sobie, że jesz śniadanie na tarasie w ogródku. Gdy już nalałeś kawy do filiżanki, zamierzasz posmarować chleb masłem. Jednak w tym momencie pies sąsiada wbiega do ogródka i zaczyna wpatrywać się w twój talerz.

'Imagine that you are eating breakfast on a garden terrace. Once you poured coffee into the cup, you want to butter your bread. But then your neighbour's dog runs into the garden and starts staring at your plate.'

| *Wyobraź* | *sobie,* | *że* | *jesz* | *śniadanie* | *w* | *ogródku* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | eat-2SG | breakfast | in | garden |
| *Gdy* | *już.* | *nalałeś* | *kawy* | *do* | *filiżanki* | *zamierzasz* |
| When | already | poured | coffee | to | cup | want-2SG |
| *posmarować* | *chleb* | *masłem.* | *Jednak* | *w* | *tym* | *momencie* |
| smear | bread | butter-INSTR | However | in | this | moment |
| *pies* | *sąsiada* | *wbiega* | *do* | *ogródka* | *i* | *zaczyna* |
| dog | neighbour-GEN | runs | into | garden | and | starts |
| *wpatrywać* | *się* | *w* | *twój* | *talerz* | | |
| staring | REFL | in | your | plate | | |

28)

Wyobraź sobie, że jedziesz pociągiem do Warszawy. Gdy już pokazałeś bilet do kontroli, zamierzasz założyć słuchawki na uszy i trochę pospać. Jednak w tym momencie dziecko siedzące naprzeciwko zaczyna cię kopać.

'Imagine that you are going by train to Warsaw. Once you showed your ticket to be checked, you want to put on headphones and sleep for a bit. But then a child sitting across from you starts kicking you.'

| *Wyobraź* | *sobie,* | *że* | *jedziesz* | *pociągiem* | *do* | *Warszawy* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | ride-2SG | train | to | Warsaw |

| Gdy | już | pokazałeś | bilet | do | kontroli | zamierzasz |
|---|---|---|---|---|---|---|
| When | already | showed-2SG.M | ticket | for | control-N | want-2SG |

| założyć | słuchawki | na | uszy | i | trochę | pospać |
|---|---|---|---|---|---|---|
| put.on-INF | headphones | on | ears | and | a bit | sleep-INF |

| Jednak | w | tym | momencie | dziecko | siedzące | naprzeciwko |
|---|---|---|---|---|---|---|
| However | in | this | moment | child | sitting | opposite |

| zaczyna | cię | kopać |
|---|---|---|
| starts | you | kick |

29)

Wyobraź sobie, że jesteś na rejsie po kanałach Amsterdamu. Gdy już wysłałeś zdjęcie do rodziców, zamierzasz przesiąść się na miejsce w cieniu. Jednak w tym momencie łódka zaczyna się chwiać i wpadasz do kanału.

'Imagine that you are on a boat tour in the canals of Amsterdam. Once you sent a picture to your parents, you want to move to a seat in the shade. But then the boat starts rocking and you fall into the canal.'

| Wyobraź | sobie, | że | jesteś | na | rejsie | po |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | on | boat.trip | on |
| kanałach | Amsterdamu | Gdy | już | wysłałeś | zdjęcie | do |
| canals | Amsterdam-GEN | When | already | sent-2SG.M | photo | to |
| rodziców | zamierzasz | przesiąść | się | na | miejsce | w |
| parents | want-2SG | change.seat | REFL | on | place | in |
| cieniu | Jednak | w | tym | momencie | łódka | zaczyna |
| shade | However | in | this | moment | boat | starts |
| się | chwiać | i | wpadasz | do | kanału | |
| REFL | rock-INF | and | fall-2SG | into | canal | |

30)

Wyobraź sobie, że jesteś w kinie plenerowym. Gdy już przyniosłeś popcorn dla grupy znajomych, zamierzasz rozsiąść się na leżaku. Jednak w tym momencie zaczyna mocno wiać i wichura porywa twój leżak.

'Imagine that you are at an open air cinema. Once you brought popcorn for a group of friends, you want to settle down on the chair. But then a heavy wind starts blowing and blows your chair away.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *w* | *kinie* | *plenerowym* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | in | cinema | open.air |
| *Gdy* | *już* | *przyniosłeś* | *popcorn* | *dla* | *grupy* | *znajomych,* |
| When | already | brought-2SG.M | popcorn | for | group | friends-GEN |
| *zamierzasz* | *rozsiąść* | *się* | *na* | *leżaku.* | *Jednak* | *w* |
| want-2SG | settle.down | REFL | on | chair | However | in |
| *tym* | *momencie* | *zaczyna* | *mocno* | *wiać* | *i* | *wichura* |
| this | moment | starts | heavily | wind-INF | and | wind |
| *porywa* | *twój* | *leżak.* | | | | |
| blows.away | your | chair. | | | | |

31)

Wyobraź sobie, że jesteś na poczcie, aby wysłać kartkę z życzeniami. Gdy już nakleiłeś znaczek na kopertę, zamierzasz napisać adres odbiorcy. Jednak w tym momencie osoba, do której wysyłasz kartkę pojawia się na poczcie.

'Imagine that you are at the post office to send a greetings card. Once you glued a stamp onto the envelope, you want to write the address on it. But then the person who you are sending the card to appears at the post office.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *na* | *poczcie* | *aby* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | at | post.office | to |
| *wysłać* | *kartkę* | *z* | *życzeniami* | *Gdy* | *już* | *nakleiłeś* |
| send-INF | card | with | wishes | When | already | glued-2SG.M |
| *znaczek* | *na* | *kopertę* | *zamierzasz* | *napisać* | *adres* | *odbiorcy* |
| stamp | on | envelope | want-2SG | write.down | address | recipient-GEN |
| *Jednak* | *w* | *tym* | *momencie* | *osoba* | *do* | *której* |
| However | in | this | moment | person | to | whom |
| *wysyłasz* | *kartkę* | *pojawia* | *się* | *na* | *poczcie* | |
| send-2SG | card | appears | REFL | at | post.office | |

32)

Wyobraź sobie, że montujesz szafkę z Ikei w sypialni. Gdy już rozłożyłeś części na dywanie, zamierzasz powkładać kołki w otwory. Jednak w tym momencie słyszysz dzwonek do drzwi, i przypominasz sobie, że masz gości na dzisiejszy wieczór.

'Imagine that you are assembling a cabinet from Ikea in the bedroom. Once you put down the parts on the carpet, you want to start putting the pegs in the holes. But then you hear the doorbell and your remember that you are having guests over tonight.'

| *Wyobraź* | *sobie,* | *że* | *montujesz* | *szafkę* | *z* | *Ikei* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | assemble-2SG | cabinet | from | Ikea |
| *w* | *sypialni* | *Gdy* | *już* | *rozłożyłeś* | *części* | *na* |
| in | bedroom | When | already | put.down-2SG.M | parts | on |
| *dywanie* | *zamierzasz* | *powkładać* | *kołki* | *w* | *otwory* | *Jednak* |
| carpet | want-2SG | put.in | pegs | in | holes | However |
| *w* | *tym* | *momencie* | *słyszysz* | *dzwonek* | *do* | *drzwi* |
| in | this | moment | hear-2SG | bell | of | door |
| *i* | *przypominasz* | *sobie,* | *że* | *masz* | *gości* | *na* |
| and | remind-2SG | REFL | that | have-2SG | guests | for |
| *dzisiejszy* | *wieczór.* | | | | | |
| today-ADJ | evening | | | | | |

33)

Wyobraź sobie, że nagrywasz krótki film podczas rodzinnej wycieczki do Krakowa. Gdy już włączyłeś kamerę przy zamku na Wawelu, zamierzasz sfilmować go ze wszystkich stron. Jednak w tym momencie podchodzi twoja mama i zaczyna wygłupiać się przed kamerą.

'Imagine that you are making a short video during a family trip to Kraków. Once you turned on the camera near the Wawel castle, you want to film it from every side. But then your mum comes up and starts acting silly in front of the camera.'

| *Wyobraź* | *sobie,* | *że* | *nagrywasz* | *krótki* | *film* | *podczas* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | record-2SG | short | video | during |
| *rodzinnej* | *wycieczki* | *do* | *Krakowa* | *Gdy* | *już* | *włączyłeś* |
| family-ADJ | trip | to | Kraków | When | already | turned.on-2SG.M |
| *kamerę* | *przy* | *zamku* | *na* | *Wawelu* | *zamierzasz* | *sfilmować* |
| camera | near | castle | on | Wawel | want-2SG | film-INF |
| *go* | *ze* | *wszystkich* | *stron* | *Jednak* | *w* | *tym* |
| it | from | all | sides | However | in | this |
| *momencie* | *podchodzi* | *twoja* | *mama* | *i* | *zaczyna* | *wygłupiać* |
| moment | comes.up | your | mum | and | starts | act.silly |
| *się* | *przed* | *kamerą* | | | | |
| REFL | in.front.of | camera | | | | |

34)

Wyobraź sobie, że siedzisz przy ognisku w lesie na biwaku. Gdy już usmażyłeś kiełbasę na ogniu, zamierzasz nałożyć sałatkę na talerz. Jednak w tym momencie z lasu wyłania się nieznana osoba i kieruje się w twoją stronę.

'Imagine that you are sitting by a fire in a forest on a camping trip. Once you fried a sausage on the fire, you want to put some salad on the plate. But then a strange person emerges from the forest and comes in your direction.'

| *Wyobraź* | *sobie,* | *że* | *siedziesz* | *przy* | *ognisku* | *na* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | sit-2SG | by | fire | on |
| *biwaku* | *Gdy* | *już* | *usmażyłeś* | *kiełbasę* | *na* | *ogniu* |
| camping | When | already | fried-2SG.M | sausage | on | fire |
| *zamierzasz* | *nałożyć* | *sałatkę* | *na* | *talerz* | *Jednak* | *w* |
| want-2SG | put.on | salad | on | plate | However | in |
| *tym* | *momencie* | *z* | *lasu* | *wyłania* | *się* | *nieznana* |
| this | moment | from | forest | emerges | REFL | unknown |
| *osoba* | *i* | *kieruje* | *się* | *w* | *twoją* | *stronę.* |
| person | and | heads | REFL | in | your | direction |

35)

Wyobraź sobie, że spędzasz dzień w parku rozrywki. Gdy już zaliczyłeś przejażdżkę po wodospadach, zamierzasz stanąć w kolejce do diabelskiego młynu. Jednak w tym momencie znajdujesz na ziemi czyjś portfel, więc postanawiasz zanieść go do punktu znalezionych rzeczy.

'Imagine that you are in an amusement park for the whole day. Once you did a ride through waterfalls, you want to stand in line for the ferris wheel. But then you find someone's wallet on the ground so you decide to bring it to the lost and found point.'

| *Wyobraź* | *sobie,* | *że* | *spędzasz* | *dzień* | *w* | *parku* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | spend-2SG | day | in | park |
| *rozrywki.* | *Gdy* | *już* | *zaliczyłeś* | *przejażdżkę* | *po* | *wodospadach,* |
| amusement-GEN | When | already | ticked.off-2SG.M | ride | through | waterfalls |
| *zamierzasz* | *stanąć* | *w* | *kolejce* | *do* | *diabelskiego* | *młynu.* |
| want-2SG | stand | in | line | to | devil-ADJ | mill |

| Jednak | w | tym | momencie | znajdujesz | na | ziemi |
|---|---|---|---|---|---|---|
| However | in | this | moment | find-2SG | on | ground |
| czyjś | portfel, | więc | postanawiasz | zanieść | go | do |
| someone's | wallet | so | decide-2SG | bring | it | to |
| punktu | znalezionych | rzeczy. | | | | |
| point | found-GEN | things-GEN | | | | |

36)

Wyobraź sobie, że planujesz obejrzeć ważny mecz siatkówki w domu. Gdy już przełączyłeś kanał na telewizorze, zamierzasz usadowić się na kanapie. Jednak w tym momencie w całym domu następuje awaria prądu.

'Imagine that you are planning to watch an important volleyball match at home. Once you swtiched the channel on the tv, you want to settle down on the couch. But then the power suddenly goes off in the whole house.'

| Wyobraź | sobie, | że | planujesz | obejrzeć | ważny | mecz |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | plan-2SG | watch-INF | important | match |
| siatkówki | w | domu | Gdy | już | przełączyłeś | kanał |
| volleyball | at | home | When | already | switched-2SG.M | channel |
| na | telewizorze | zamierzasz | usadowić | się | na | kanapie |
| on | TV | want-2SG | settle | REFL | on | couch |
| Jednak | w | tym | momencie | w | całym | domu |
| However | in | this | moment | in | whole | house |
| następuje | awaria | prądu | | | | |
| takes.place | breakdown | electricity-GEN | | | | |

37)

Wyobraź sobie, że próbujesz nauczyć się grać na gitarze. Gdy już poćwiczyłeś akordy przez godzinę, zamierzasz znaleźć filmik instruktażowy do łatwej piosenki. Jednak w tym momencie zaczynasz się zastanawiać, czy twoja gitara jest na pewno dobrze nastrojona.

'Imagine that you are trying to learn to play guitar. Once you practiced the chords for an hour, you want to find a video tutorial for an easy song. But then you start to wonder whether the guitar is really well tuned.'

| Wyobraź | sobie, | że | próbujesz | nauczyć | się | grać |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | try-2SG | learn-INF | REFL | play-INF |
| na | gitarze | Gdy | już | poćwiczyłeś | akordy | przez |
| on | guitar | When | already | practiced-2SG.M | chords | for |
| godzinę | zamierzasz | znaleźć | filmik | instruktażowy | do | łatwej |
| hour | want-2SG | find-INF | video | instructional | for | easy |
| piosenki | Jednak | w | tym | momencie | zaczynasz | się |
| song | However | in | this | moment | start-2SG | REFL |
| zastanawiać, | czy | twoja | gitara | jest | na | pewno |
| wonder | whether | your | guitar | is | for | sure |
| dobrze | nastrojona. | | | | | |
| well | tuned | | | | | |

38)

Wyobraź sobie, że zapisujesz się na zajęcia w siłowni w twojej okolicy. Gdy już wypełniłeś formularz w recepcji, zamierzasz iść się przebrać w szatni. Jednak w tym momencie podchodzi do ciebie pracownik i oferuje cię oprowadzenie cię po siłowni.

'Imagine that you are signing up for classes at the local gym. Once you filled out the form at the reception, you want to go change in the changing room. But then an employee comes up to you and offers to show you around the gym.'

| Wyobraź | sobie, | że | zapisujesz | się | na | zajęcia |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | sign.up-2SG | REFL | for | classes |
| w | siłowni | w | twojej | okolicy | Gdy | już |
| at | gym | in | your | area | When | already |
| wypełniłeś | formularz | w | recepcji | zamierzasz | iść | się |
| filled.out-2SG.M | form | at | reception | want-2SG | go-INF | REFL |
| przebrać | w | szatni | Jednak | w | tym | momencie |
| change-INF | in | changing.room | However | in | this | moment |
| podchodzi | do | ciebie | pracownik | i | oferuje | oprowadzenie |
| comes.up | to | you | employee-M | and | offers | showing.around |
| cię | po | siłowni | | | | |
| you | around | gym | | | | |

39)

Wyobraź sobie, że wynajmujesz pokój gościnny w domku nad jeziorem. Gdy już zapłaciłeś kaucję w dzień przyjazdu, zamierzasz przejść się po okolicy. Jednak w tym momencie gospodarze domu częstują cię kawą i ciastem.

'Imagine that you are renting a guest room in a house by a lake. Once you paid the deposit on the day of the arrival, you want to take a walk around the area. But then the hosts offer you coffee and cake.'

| *Wyobraź* | *sobie,* | *że* | *wynajmujesz* | *pokój* | *gościnny* | *w* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | rent-2SG | room | guest-ADJ | in |
| *domku* | *nad* | *jeziorem* | *Gdy* | *już* | *zapłaciłeś* | *kaucję* |
| house-DIM | at | lake | When | already | paid-2SG.M | deposit |
| *w* | *dzień* | *przyjazdu* | *zamierzasz* | *przejść* | *się* | *po* |
| on | day | arrival-GEN | want-2SG | walk | REFL | around |
| *okolicy* | *Jednak* | *w* | *tym* | *momencie* | *gospodarze* | *domu* |
| area | However | in | this | moment | hosts-M | house-GEN |
| *częstują* | *cię* | *kawą* | *i* | *ciastem* | | |
| offer | you | coffee | and | cake | | |

40)

Wyobraź sobie, że przygotowujesz drinki dla gości na imprezie. Gdy już wymieszałeś składniki w shakerze, zamierzasz znaleźć odpowiednie szklanki. Jednak w tym momencie dociera do ciebie, że zamiast cukru w miksturze przypadkowo znalazła się sól.

'Imagine that you are making cocktails for guests at a party. Once you mixed the ingredients in a shaker, you want to find the right glasses. But then you realise that instead of sugar, salt accidentally ended up in the mixture.'

| *Wyobraź* | *sobie,* | *że* | *przygotowujesz* | *drinki* | *dla* | *gości* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | prepare-2SG | cocktails | for | guests |
| *na* | *imprezie.* | *Gdy* | *już* | *wymieszałeś* | *składniki* | *w* |
| at | party | When | already | mixed-2SG.M | ingredients | in |
| *shakerze,* | *zamierzasz* | *znaleźć* | *odpowiednie* | *szklanki.* | *Jednak* | *w* |

| shaker | want-2SG | find | appropriate | glasses | However | in |
|---|---|---|---|---|---|---|
| *tym* | *momencie* | *dociera* | *do* | *ciebie,* | *że* | *zamiast* |
| this | moment | gets | to | you | that | instead.of |
| *cukru* | *w* | *miksturze* | *przypadkowo* | *znalazła* | *się* | *sól.* |
| sugar | in | mixture | accidentally | found | REFL | salt |

41)

Wyobraź sobie, że obserwujesz niebo w bezchmurną noc w górach. Gdy już wypatrzyłeś Wenus wśród gwiazd, zamierzasz sięgnąć po lornetkę i znaleźć kilka gwiazdozbiorów. Jednak w tym momencie ktoś podchodzi do ciebie i pyta, czy może pożyczyć twoją lornetkę.

'Imagine that you are looking at the sky on a cloudless night in the mountains. Once you spotted Venus among the starts, you want to take the binoculars and find a few constellations. But then someone up to you and asks if they can borrow your binoculars.'

| *Wyobraź* | *sobie,* | *że* | *obserwujesz* | *niebo* | *w* | *bezchmurną* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | watch-2SG | sky | on | cloudless |
| *noc* | *w* | *górach* | *Gdy* | *już* | *wypatrzyłeś* | *Wenus* |
| night | in | mountains | When | already | spotted.2SG.M | Venus |
| *wśród* | *gwiazd* | *zamierzasz* | *sięgnąć* | *po* | *lornetkę* | *i* |
| among | stars | want-2SG | reach | for | binoculars | and |
| *znaleźć* | *kilka* | *gwiazdozbiorów.* | *Jednak* | *w* | *tym* | *momencie* |
| find | several | constellations | However | in | this | moment |
| *ktoś* | *podchodzi* | *do* | *ciebie* | *i* | *pyta,* | *czy* |
| someone | comes.up | to | you | and | asks | whether |
| *może* | *pożyczyć* | *twoją* | *lornetkę.* | | | |
| can-3SG | borrow | your | binoculars | | | |

42)

Wyobraź sobie, że jesteś z rodziną na grzybach w pobliskim lesie. Gdy już nabrałeś kurek do koszyka, zamierzasz udać się w stronę samochodu. Jednak w tym momencie słyszysz radosny krzyk twojej cioci, która znalazła miejsce pełne prawdziwków.

'Imagine that you are picking mushrooms with your family in a nearby forest. Once you collected chanterelles into the basket, you want to head towards the car. But then you hear a joyful cry from your aunt who found a spot full of porcinos.'

| Wyobraź | sobie, | że | jesteś | z | rodziną | na |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | with | family | at |
| grzybach | w | pobliskim | lesie | Gdy | już | nabrałeś |
| mushrooms | in | nearby | forest | When | already | collected-2SG.M |
| kurek | do | koszyka, | zamierzasz | udać | się | w |
| chanterelles | in | basket | want-2SG | head | REFL | in |
| stronę | samochodu. | Jednak | w | tym | momencie | słyszysz |
| direction | car-GEN | However | in | this | moment | hear-2SG |
| radosny | krzyk | twojej | cioci, | która | znalazła | miejsce |
| joyful | scream | your | aunt | who | found | place |
| pełne | prawdziwków. | | | | | |
| full | porcinos-GEN | | | | | |

43)

Wyobraź sobie, że montujesz karmnik dla ptaków na zimę. Gdy już powiesiłeś domek na balkonie, zamierzasz wsypać do niego pokarm. Jednak w tym momencie podlatują dwie sikorki i próbują dostać się do torby z jedzeniem.

'Imagine that you are installing a bird feeder for the winter. Once you hung the house on the balcony, you want to put food into it. But then two tits fly by and try to get inside of the bag of food.'

| Wyobraź | sobie, | że | montujesz | karmnik | dla | ptaków |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | install-2SG | feeder | for | birds |
| na | zimę | Gdy | już | powiesiłeś | domek | na |
| for | winter | When | already | hung-2SG.M | house-DIM | on |

| balkonie | zamierzasz | wsypać | do | niego | pokarm | Jednak |
|---|---|---|---|---|---|---|
| balcony | want-2SG | pour-INF | to | it | food | However |
| *w* | *tym* | *momencie* | *podlatują* | *dwie* | *sikorki* | *i* |
| in | this | moment | fly.up | two | tits | and |
| *próbują* | *dostać* | *się* | *do* | *torby* | *z* | *jedzeniem.* |
| try | get | REFL | to | bag | with | food |

44)

Wyobraź sobie, że jesteś na basenie w hotelu. Gdy już zamoczyłeś stopy w wodzie, zamierzasz wskoczyć i zanurkować. Jednak w tym momencie w rogu basenu widzisz brudną pieluchę.

'Imagine that you are at a hotel pool. Once you wet your feet in the water, you want to jump inside and dive. But then in the corner of the pool you see a dirty diaper.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *na* | *basenie* | *w* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | at | pool | in |
| *hotelu* | *Gdy* | *już* | *zamoczyłeś* | *stopy* | *w* | *wodzie* |
| hotel | When | already | wet-2SG.M | feet | in | water |
| *zamierzasz* | *wskoczyć* | *i* | *zanurkować* | *Jednak* | *w* | *tym* |
| want-2SG | jump.in | and | dive | However | in | this |
| *momencie* | *w* | *rogu* | *basenu* | *widzisz* | *brudną* | *pieluchę* |
| moment | in | corner | pool-GEN | see-2SG | dirty | diaper |

45)

Wyobraź sobie, że jesteś na nartach z grupą przyjaciół. Gdy już wjechałeś wyciągiem na szczyt góry, zamierzasz zrobić zdjęcie krajobrazu. Jednak w tym momencie wjeżdża w ciebie osoba wysiadająca z wyciągu i razem lecicie na dół.

'Imagine that you are on a skiing trip with a group of friends. Once you rode the ski lift to the top of the mountain, you want to take a picture of the view. But in that moment a person exiting the lift skis into you and you both start going down the hill.'

| *Wyobraź* | *sobie,* | *że* | *jesteś* | *na* | *nartach* | *z* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | are | at | skis | with |
| *grupą* | *przyjaciół* | *Gdy* | *już* | *wjechałeś* | *wyciągiem* | *na* |
| group | friends-GEN | When | already | rode.up-2SG.M | lift-INST | on |
| *szczyt* | *góry,* | *zamierzasz* | *zrobić* | *zdjęcie* | *krajobrazu.* | *Jednak* |

| top | mountain-GEN | want-2SG | take | photo | landscape-GEN | However |
|---|---|---|---|---|---|---|
| *w* | *tym* | *momencie* | *wjeżdża* | *w* | *ciebie* | *osoba* |
| in | this | moment | rides | into | you | person |
| *wysiadająca* | *z* | *wyciągu* | *i* | *razem* | *lecicie* | *w* |
| exiting | from | lift | and | together | fall-2PL | to |
| *dół* | | | | | | |
| bottom | | | | | | |

46)

Wyobraź sobie, że uczestniczysz w pierwszym wykładzie na nowym kierunku studiów. Gdy już otworzyłeś notatnik na laptopie, zamierzasz zapisać kilka ważnych informacji. Jednak w tym momencie z twojej przeglądarki zaczyna grać na cały głos reklama z otwartej strony internetowej.

'Imagine that you are attending the first lecture of a new university programme. Once you opened a notebook on your laptop, you want to write down some important information. But then an ad starts playing at full volume from an open website on your browser.'

| *Wyobraź* | *sobie,* | *że* | *uczestniczysz* | *w* | *pierwszym* | *wykładzie* |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | attend-2SG | in | first | lecture |
| *na* | *nowym* | *kierunku* | *studiów* | *Gdy* | *już* | *otworzyłeś* |
| on | new | programme | university-GEN | When | already | opened-2SG.M |
| *notatnik* | *na* | *laptopie* | *zamierzasz* | *zapisać* | *kilka* | *ważnych* |
| notepad | on | laptop | want-2SG | note.down | several | important |
| *informacji.* | *Jednak* | *w* | *tym* | *momencie* | *z* | *twojej* |
| information | However | in | this | moment | from | your |
| *przeglądarki* | *zaczyna* | *grać* | *na* | *cały* | *głos* | *reklama* |
| browser | starts | playing | on | full | volume | ad |
| *z* | *otwartej* | *strony* | *internetowej.* | | | |
| from | open | site | internet-ADJ | | | |

47)

Wyobraź sobie, że bierzesz udział w kursie spadochronowym. Gdy już przypiąłeś spadochron w samolocie, zamierzasz wykonać swój pierwszy skok. Jednak w tym momencie twój instruktor oświadcza, że źle się czuje i nie wie, czy będzie w stanie z tobą skoczyć.

'Imagine that you are taking part in a sky diving course. Once you attached the parachute on the plane, you want to make you first dive. But then your instructor announces that he is not feeling well and he does not know whether he will be able to jump with you.'

| Wyobraź | sobie, | że | bierzesz | udział | w | kursie |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | take-2SG | part | in | course |

| spadochronowym. | Gdy | już | przypiąłeś | spadochron | w | samolocie, |
|---|---|---|---|---|---|---|
| parachute-ADJ | When | already | attached-2SG.M | parachute | in | plane |

| zamierzasz | wykonać | swój | pierwszy | skok. | Jednak | w |
|---|---|---|---|---|---|---|
| want-2SG | make | POSS | first | jump | However | in |

| tym | momencie | twój | instruktor | oświadcza, | że | źle |
|---|---|---|---|---|---|---|
| this | moment | your | instructor | announces | that | unwell |

| się | czuje | i | nie | wie, | czy | będzie |
|---|---|---|---|---|---|---|
| REFL | feels | and | not | knows | whether | be-FUT |

| w | stanie | z | tobą | skoczyć. |
|---|---|---|---|---|
| in | state | with | you | jump |

48)

Wyobraź sobie, że przemeblowujesz swój pokój. Gdy już przesunąłeś biurko pod okno, zamierzasz postawić na nim lampkę. Jednak w tym momencie orientujesz się, że nie ma w pobliżu żadnego gniazdka.

'Imagine that you are rearranging your room. After moving the desk next to the window, you want to put a lamp on it. But then, you realise that there is no power socket near it.'

| Wyobraź | sobie, | że | przemeblowujesz | swój | pokój. | Gdy |
|---|---|---|---|---|---|---|
| Imagine-2SG.IMP | REFL | that | rearrange-2SG | POSS | room | When |

| już | przesunąłeś | biurko | pod | okno, | zamierzasz | postawić, |
|---|---|---|---|---|---|---|
| already | moved-2SG.M | desk | under | window | want-2SG | put |

| na | nim | lampkę. | Jednak | w | tym | momencie |
|---|---|---|---|---|---|---|
| on | it | lamp | However | in | this | moment |

| orientujesz | się, | że | nie | ma | w | pobliżu |
|---|---|---|---|---|---|---|
| realise | REFL | that | not | COP | in | nearby |

| żadnego | gniazdka. |
|---|---|
| any | socket |

# Appendix B

*Table B1. Output of the linear mixed model conducted on the main region of interest (verb).*

| | Estimate | Standard error | t-value | p-value (based on z-distribution) |
|---|---|---|---|---|
| Intercept | 6.2143 | 0.0421 | 147.3164 | 0.0000 |
| gendermarkingnovyes | -0.0156 | 0.0050 | -3.1456* | 0.0017 |
| blockonevtwo | -0.0889 | 0.0120 | -7.4335* | 0.0000 |
| ppgenderfvm | 0.0041 | 0.0421 | 0.0972 | 0.9226 |
| gendermarkingnovyes:blockonevtwo | 0.0056 | 0.0050 | 1.1256 | 0.2603 |
| gendermarkingnovyes:ppgenderfvm | -0.0043 | 0.0050 | -0.8655 | 0.3868 |
| blockonevtwo:ppgenderfvm | -0.0344 | 0.0120 | -2.8746* | 0.0040 |
| gendermarkingnovyes:blockonevtwo:ppgenderfvm | -0.0114 | 0.0050 | -2.2897* | 0.0223 |

\* t > 1.96

*Note.* ppgender = participant gender; f = female; m = male

*Table B2. Output of the linear mixed model conducted on the main region of interest (verb).*

| | Estimate | Standard error | t-value | p-value (based on z-distribution) |
|---|---|---|---|---|
| Intercept | 6.2347 | 0.0415 | 150.2871 | 0.0000 |
| gendermarkingnovyes | 0.0070 | 0.0051 | 1.3641 | 0.1725 |
| blockonevtwo | -0.0880 | 0.0106 | -8.2922* | 0.0000 |
| ppgenderfvm | -0.0072 | 0.0412 | -0.1752 | 0.8609 |
| gendermarkingnovyes:blockonevtwo | 0.0161 | 0.0051 | 3.1435* | 0.0017 |
| gendermarkingnovyes:ppgenderfvm | 0.0070 | 0.0061 | 1.1551 | 0.2480 |
| blockonevtwo:ppgenderfvm | -0.0308 | 0.0106 | -2.9034* | 0.0037 |
| gendermarkingnovyes:blockonevtwo:ppgenderfvm | -0.0010 | 0.0051 | -0.2006 | 0.8410 |

\* t > 1.96

*Note.* ppgender = participant gender; f = female; m = male